



Natural
Resources
Conservation
Service

In cooperation with
United States
Department of
Interior, Bureau of Land
Management; and
University of Nevada
Agricultural
Experiment Station

Soil Survey of Nye County, Nevada, Southwest Part Part I

How To Use This Soil Survey

This survey is divided into three parts. Part I includes general information about the survey area; descriptions of the detailed soil map units and soil series in the area; and a description of how the soils formed. Part II describes the use and management of the soils and the major soil properties. Part III includes the maps.

The **detailed soil map units** follow the general information about the survey area. These map units can be useful in planning the use and management of small areas.

To find information about your area of interest, locate that area on the **Index to Map Sheets**, note the number of the map sheet, and turn to that sheet.

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Index to Map Units** in Part I of this survey, which lists the map units by symbol and name and shows the page where each map unit is described.

The **Summary of Tables** shows which table has data on a specific land use for each detailed soil map unit. See **Contents** for sections of this publication that may address your specific needs.

A **State Soil Geographic Database (STATSGO)** is available for this survey area. This database consists of a soils map at a scale of 1 to 250,000 and descriptions of groups of associated soils. It replaces the general soil map published in older soil surveys. The map and the database can be used for multi-county planning, and map output can be tailored for a specific use. More information about the State Soil Geographic Database for this survey area, or any portion of Nevada, is available at the local office of the Natural Resources Conservation Service.

Some standards or values may change as more information is collected and analyzed. Thus, as older published interpretive information becomes outdated, new interpretive data must be generated and tailored to local conditions. This information is added to the State Subset of the **National Soil Survey Information System (NASIS)** database as needed. Map Unit Records are the soil survey specific data and interpretations in the National Soil Survey Information System database.

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 1985. Soil names and descriptions were approved in 1988. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 1988. This survey was made cooperatively by the Natural Resources Conservation Service and the U.S. Department of Interior, Bureau of Land Management, and Bureau of Indian Affairs and the University of Nevada Agricultural Experiment Station. It is part of the technical assistance furnished to the Pahrump and Tonopah Resource Conservation District.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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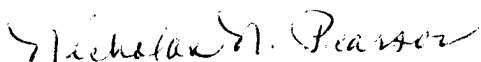
Foreword

This soil survey contains information that can be used in land-planning programs in Nye County, Nevada, Southwest Part. It contains predictions of soil behavior for selected land uses. The survey also highlights limitations and hazards inherent in the soil, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, ranchers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Nevada Cooperative Extension.



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Soil Survey of Nye County, Nevada, Southwest Part

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United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with the United States Department of Interior, Bureau of Land Management, and the University of Nevada Agricultural Experiment Station

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area are in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind or segment of the landscape. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landscape, soil scientists develop a concept, or model, of how the soils were formed. Thus, during mapping, this model enables the soil scientists to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Individual soils on the landscape commonly merge into one another as their characteristics gradually change. To construct an accurate map, however, soil scientists must determine the boundaries between the soils. They can

observe only a limited number of soil profiles.

Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted color, texture, size, and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field

tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

General Nature of the Survey Area

This section gives general information about the survey area. It briefly discusses history; industries and transportation; physiography, drainage, and geology; and climate.

History

Small populations of native people occupied parts of the survey area in ancient times. Concentrated in the areas near water, the earliest peoples were primarily hunters and gatherers. In more recent time, Western Shoshones and Paiutes utilized the area. Limited agriculture, as well as hunting and gathering, was a part of the livelihood, particularly in the areas near Pahrump and Ash Meadows. Water is locally plentiful in those parts of the area.

Pahrump, located in the southern part of the area, got its name from the Paiute Indians, "Pah" meaning water, and "rump" meaning rock. This was a lush valley in which they cultivated corn, melons, squashes, and wild grapes.

European settlement began in the mid-1800's, primarily as mining camps and local ranches. In 1876, Joseph Yount established the Manse Ranch in the Pahrump area and developed a good market of food products and timber with the miners and prospectors in mining camps such as

Tecopa and Johnnie. The pattern was similar in other parts of the area, as mines sprang up in Rhyolite, Bullfrog, Gold Center, Beatty, and other small camps and prospects.

In the 1930's, farmer's began to develop parts of the irrigable valleys. Again, water was the major concern. The plentiful water near Pahrump and the presence of artesian springs caused considerable interest in farming in the area. Cotton became a major crop for farms in the Pahrump vicinity, and continued as a major source of revenue into the 1980's.

With increasing population in the Las Vegas area, the southern part of the survey area presently is undergoing rapid growth. Small "ranchettes" and rural properties are becoming commonplace. The federally managed lands are also increasingly being used by recreationists, as well as continuing to support livestock grazing.

Industry and Transportation

The main industries in the survey area are ranching and mining.

The ranches are dominantly cow-calf operations, and the current year's crop generally is sold in the fall and exported. Several herds of sheep graze through the survey area.

Numerous mines are in the survey area. The major minerals are gold, silver, lead, mercury, copper, and bentonite.

Primary highway access to Nye County include U.S. route 95 and State routes 160 and 374. Many gravel and improved dirt roads provide access to the area. The Beatty airport is located in the survey area. Motor vehicles are the primary means of transportation throughout the survey area.

Physiography, Drainage, and Geology

The soil survey area is in the southern part of the Basin and Range Physiographic Province (4). The area is typical of the province, with a number of closed basins or bolsons separated by hills and mountains, broad fan piedmonts, and nearly level bolsons (5). Landforms on the fan piedmonts are well developed, with stable fan remnants that are dissected by more recent inset fans and drainages. The bolsons are typified by broad alluvial flats and lake plains with shallow drainage channels. Elevations within the area range from about 2,500 feet in the southern valleys to near 5,500 feet in the northern valleys. Mountains are usually 1,000 to 6,000 feet higher than adjacent basins, with peak elevations near 9,000 feet.

Irrigation water for native meadows, pastures, and alfalfa crops in the area is supplied by wells and streams. At the higher elevations numerous small springs, seeps, and intermittent streams provide water for livestock and wildlife. Wells and springs provide water for domestic use.

Water from the majority of the tributaries in the soil survey area eventually ends up on bolson floors. The mostly intermittent flow of these streams is supplied by spring runoff and summer convection storms.

The geology of the survey area is variable and complex. The southern portion of the survey area is mostly underlain with Precambrian, Cambrian, Ordovician, and Silurian rocks. Older Precambrian rocks consist of gneissic granite, quartz monozite, and quartz biotite schist. Younger Precambrian rocks consist of quartzite, siltstone, micaceous shale, schist, marble, dolomite, and limestone. Cambrian, Ordovician, and Silurian rocks consist mainly of limestone and dolomite, but include sandstone, siltstone, shale, and quartzite (3).

The northern portion of the survey area is mostly underlain by Tertiary rocks. Tertiary rock outcrops are mainly pyroclastic tuffs and ash-flow tuff ranging in composition from dacitic to quartz-latic. Lava flows and intrusive rocks of similar composition are also common. Andesitic and basalt flows and intrusives are present in some parts of the area. The valleys are filled with Pleistocene alluvium and are covered with a coat of Holocene sediments (3).

Climate

Table 1 gives data on temperature and precipitation for the survey area as recorded at Pahrump University of Nevada lab in the period 1949 to 1990; Amargosa Farms - Garey, in the period 1966 to 1990; and at Beatty 8 N in the period 1973 to 1990. Table 2 shows probable dates of the first freeze in fall and the last freeze in the spring. Table 3 provides data on length of growing season for the three stations.

The data summarized in the following paragraphs is for the Pahrump University of Nevada lab and does not include information for Amargosa Farms or Beatty. Consult the tables for monthly temperature and precipitation averages for each of the stations.

In winter, the average temperature is 43.8 degrees F. and the average daily minimum temperature is 28.2 degrees. The lowest temperature on record, which occurred at Pahrump on December 23, 1990 is -2 degrees. In summer, the average temperature is 81.5 degrees and the average daily maximum temperature is 98.9 degrees. The highest temperature, which occurred at Pahrump on July 14, 1972 is 115 degrees.

Growing degree days, shown in Table 1, are equivalent to "heat units". Beginning in the spring, growing degree days accumulate by the amount the average temperature exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze of spring and the first freeze of fall.

The total annual precipitation is 4.53 inches. Of this, about 1.55 inches, or 34 percent, usually falls in April through September. The growing season for most crops falls within this period. The heaviest 1-day rainfall during the period of record was 2.40 inches at Pahrump on February 1, 1979. Thunderstorms occur on about 14 days each year, and most occur in July.

The average seasonal snowfall is .3 inches. The greatest snow depth at any one time during the period of record was 4 inches recorded on January 10, 1949. On an average, 2 days per year have at least 1 inch of snow on the ground.

The average relative humidity in mid-afternoon is about 20 percent. Humidity is higher at night, and the average at dawn is about 40 percent. The sun shines 89 percent of the time in summer and 79 percent in winter. The prevailing wind is from the southwest. Average wind speed is highest, 11.1 miles per hour, in May.

Detailed Soil Map Units

The map units on the detailed maps in Part III of this publication represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. They also can be used to plan the management needed for those uses. More information about each map unit is given under the headings "Use and Management of the Soils" and "Soil Properties."

A map unit delineation on the detailed soil maps represents an area dominated by one or more soils or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils or miscellaneous areas. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils and miscellaneous areas are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, are mapped without including areas of other taxonomic classes. Consequently, map units are made up of the soils or miscellaneous areas for which they are named and some "included" areas that belong to other taxonomic classes.

Most included soils have properties and behavioral characteristics similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, inclusions. They may or may not be mentioned in the map unit description. Other included soils and miscellaneous areas, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, inclusions. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. The included areas of contrasting soils or miscellaneous areas are mentioned in the map unit descriptions. A few included areas may not have been observed, and consequently

they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of included areas in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into segments that have similar use and management requirements. The delineation of such landscape segments on the map provides sufficient information for the development of resource plans, but if intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit. The principal hazards and limitations to be considered in planning for specific uses are identified in the tables and narrative in Part II.

Kinds of Map Units

Soils that have profiles that are almost alike make up a soil series. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, wetness, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Some of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Cobatus loam drained, 0 to 2 percent slopes is a phase of the Cobatus series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes or associations. A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of

the soils or miscellaneous areas are somewhat similar in all areas. Commski-Ashmed complex, 4 to 50 percent slopes is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Advokay-Blacktop association is an example.

This survey includes *miscellaneous* areas. Such areas have little or no soil material and support little or no vegetation. Dune land is an example.

Acreage and Extent

Table 4 gives the acreage and proportionate extent of each map unit. Other tables (see "Summary of Tables") give properties of the soils and the limitations, capabilities, and potentials for many uses. The Glossary defines many of the terms used in describing the soils or miscellaneous areas.

Headings and Introductory Phrases

In the map unit descriptions that follow, a semi-tabular format is used. In this format the major headings are centered in the column (for example, *Composition*). They identify the information grouped directly below them. Introducing each item of information under the centered heading is a term or phrase (for example, *Landform*) that identifies or describes the information. Many of the centered headings and introductory terms are self-explanatory; however, some of them need further explanation and are defined in the Glossary. Explanations of the headings and introductory phrases are provided in the following paragraphs, generally in the order in which they are used in the map unit descriptions.

Map Unit Setting is given for the entire map unit. The MLRA, or major land resource area, is listed first. The MLRA is a broad ecological area with characteristic climate, topography, vegetation, water resources, soils and land use (5). This section identifies the landscape in which the map unit is located. The landscape positions given for the entire map unit generally are broader than those given for each component.

Composition is given for the components (soils or miscellaneous areas) identified in the name of the map unit as well as for the contrasting inclusions. Contrasting inclusions are inextensive components that differ in use and management from the soils or miscellaneous areas

for which the map unit is named. As was explained earlier, inclusions can either be *similar* or *contrasting*. Note that in the *Composition* section a single percentage is provided for a named soil and its similar inclusions because their use and management are similar.

Component Description lists the characteristics of the major components. These include landform, parent material, typical vegetation, a brief profile description, slope, runoff, available water capacity, drainage class, and other important properties of the soil. Also provided are important interpretive groups including land capability classification and ecological site numbers.

Ecological Site is the assigned rangeland or grazed forest land ecological site that identifies a unique potential native plant community. The plant species and production typical of each ecological site are listed by map unit in the section "Rangeland Plants and Woodland Understory." Additional information about managing these sites is provided under the heading "Rangeland and Grazeable Woodland Resource Management" in Part II of this publication. Further information also can be obtained from the local office of the Natural Resources Conservation Service.

Contrasting Inclusions lists additional information about the soils of minor extent in the map unit. The slope, landform, typical vegetation, and ecological site number are listed for each soil or miscellaneous area as appropriate.

Map Unit Descriptions

1314--Weiser-Wechech association

Map Unit Setting

MLRA: 30
Landscape: Fan piedmont
Elevation: 2,800 to 3,800
Precipitation: 4 to 7 inches
Air temperature: 61 to 68 degrees Fahrenheit
Frost-free period: 220 to 250 days

Composition

Weiser extremely gravelly fine sandy loam, 2 to 8 percent slopes--70 percent
Wechech extremely gravelly fine sandy loam, 2 to 8 percent slopes--15 percent
Commski very gravelly fine sandy loam, 2 to 8 percent slopes--6 percent
Weiser very gravelly sandy loam, 2 to 4 percent slopes--5 percent
Typic Torriorthents very gravelly sandy loam, 2 to 4 percent slopes--4 percent

Component Description**Weiser and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White bursage, ephedra, winterfat, big galleta, range ratany, creosotebush, other shrubs

Typical profile:

Surface rock fragments: About 10 percent cobbles, 55 percent gravel

Layer 1--0 to 6 inches; extremely gravelly fine sandy loam

Layer 2--6 to 60 inches; stratified very gravelly fine sandy loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XB102NV--Gravelly Loam 5-7 P.Z.

Component Description**Wechech and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White bursage, ephedra, winterfat, big galleta, range ratany, creosotebush, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 70 percent gravel

Layer 1--0 to 2 inches; extremely gravelly fine sandy loam

Layer 2--2 to 13 inches; very gravelly sandy loam

Layer 3--13 to 60 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very high

Depth to restrictive feature: Petrocalcic: 8 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.9 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB102NV--Gravelly Loam 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Commski and similar soils**

Composition: 0 to 6 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: White bursage, shadscale, creosotebush, Indian ricegrass, desert needlegrass

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Weiser and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: White bursage, creosotebush, big galleta, bush muhly, spiny menodora

Ecological site: 030XB075NV--Gravelly Fan 5-7 P.Z.

Typic Torriorthents and similar soils

Composition: 0 to 4 percent

Classification: Sandy-skeletal, carbonatic, thermic

Typic Torriorthents

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: White bursage, hollyleaf bursage, desertwillow, big galleta, white burrobrush, creosotebush

Ecological site: 030XB028NV--Valley Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

1315--Lastchance-Commski association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,900 to 4,100

Precipitation: 4 to 7 inches

Air temperature: 57 to 64 degrees Fahrenheit

Frost-free period: 180 to 250 days

Composition

Lastchance extremely gravelly loam, 4 to 15 percent slopes--40 percent

Lastchance extremely gravelly loam, 4 to 15 percent slopes--30 percent

Commski very gravelly fine sandy loam, 2 to 8 percent slopes--15 percent

Ferrogold extremely gravelly loam, 4 to 15 percent slopes--5 percent

Arizo very gravelly loamy sand, 2 to 8 percent slopes--5 percent

Lastchance extremely cobbly fine sandy loam, 2 to 8 percent slopes--5 percent

Component Description**Lastchance and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White bursage, creosotebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 10 percent cobbles, 60 percent gravel

Layer 1--0 to 2 inches; extremely gravelly loam

Layer 2--2 to 20 inches; very gravelly loam

Layer 3--20 to 60 inches; cemented material

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: High

Depth to restrictive feature: Petrocalcic: 20 to 39 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-7 P.Z.

Component Description**Lastchance upper elevation fans and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Indian ricegrass, white bursage, range ratany, winterfat, creosotebush, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 10 percent cobbles, 60 percent gravel

Layer 1--0 to 2 inches; extremely gravelly loam

Layer 2--2 to 20 inches; very gravelly loam

Layer 3--20 to 60 inches; cemented material

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: High

Depth to restrictive feature: Petrocalcic: 20 to 39 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA007NV--Gravelly Loam 5-7 P.Z.

Component Description**Commski and similar soils**

Landform: Inset fans

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Winterfat, creosotebush, range ratany, white bursage, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: About 55 percent gravel, 3 percent cobbles, less than 1 percent stones

Layer 1--0 to 5 inches; very gravelly fine sandy loam

Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
Runoff: Medium
Permeability class (root zone): Moderate
Available water capacity: About 3 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA007NV--Gravelly Loam 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Ferrogold and similar soils

Composition: 0 to 5 percent
Slope: 4 to 15 percent
Landform: Fan remnants
Typical vegetation: Indian ricegrass, white bursage, blackbrush, Nevada ephedra, creosotebush
Ecological site: 030XA094NV--Shallow Gravelly Loam 8-12 P.Z.

Arizo and similar soils

Composition: 0 to 5 percent
Slope: 2 to 8 percent
Landform: Drainageways
Typical vegetation: Creosotebush, desert needlegrass, bladdersage, cattle saltbush, Indian ricegrass, white burrobrush, white bursage
Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Lastchance and similar soils

Composition: 0 to 5 percent
Slope: 2 to 8 percent
Landform: Fan remnants
Typical vegetation: White bursage, creosotebush, spiny menodora, range ratany
Ecological site: 030XA071NV--Cobbly Claypan 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

1316--Lastchance-Ferrogold-Commski association

Map Unit Setting

MLRA: 30
Landscape: Fan piedmont
Elevation: 3,600 to 4,600
Precipitation: 5 to 9 inches
Air temperature: 56 to 64 degrees Fahrenheit
Frost-free period: 180 to 250 days

Composition

Lastchance extremely gravelly loam, 4 to 15 percent slopes--40 percent
Ferrogold extremely gravelly loam, 4 to 15 percent slopes--30 percent
Commski very gravelly fine sandy loam, 2 to 8 percent slopes--15 percent
Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--6 percent
Arizo very gravelly loamy sand, 2 to 8 percent slopes--3 percent
Lastchance extremely cobbly fine sandy loam, 2 to 8 percent slopes--3 percent
Irongold extremely gravelly loam, 4 to 15 percent slopes--3 percent

Component Description

Lastchance and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from limestone and dolomite
Typical vegetation: Indian ricegrass, white bursage, range ratany, winterfat, creosotebush, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 10 percent cobbles, 60 percent gravel
Layer 1--0 to 2 inches; extremely gravelly loam
Layer 2--2 to 20 inches; very gravelly loam
Layer 3--20 to 60 inches; cemented material

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
Runoff: High
Depth to restrictive feature: Petrocalcic: 20 to 39 inches

Permeability class (root zone): Moderate
 Available water capacity: About 1.2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA007NV--Gravelly Loam 5-7 P.Z.

Component Description

Ferrogold and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Indian ricegrass, white bursage, blackbrush, Nevada ephedra, creosotebush

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 65 percent gravel
 Layer 1--0 to 3 inches; extremely gravelly loam
 Layer 2--3 to 9 inches; very gravelly loam
 Layer 3--9 to 15 inches; very gravelly loam
 Layer 4--15 to 60 inches; cemented material

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 14 to 20 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 1.0 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA094NV--Shallow Gravelly Loam 8-12 P.Z.

Component Description

Commski and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: White bursage, winterfat, creosotebush, desert needlegrass, Indian ricegrass, range ratany

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel
 Layer 1--0 to 5 inches; very gravelly fine sandy loam
 Layer 2--5 to 14 inches; extremely gravelly sandy loam
 Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Medium
 Permeability class (root zone): Moderate
 Available water capacity: About 3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA007NV--Gravelly Loam 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Niavi and similar soils

Composition: 0 to 6 percent
 Slope: 2 to 8 percent
 Landform: Stream terraces
 Typical vegetation: Anderson's wolfberry, Mojave buckwheat, creosotebush, white bursage, big galleta, Virgin River encelia, range ratany, ephedra
 Ecological site: 030XB134NV--Quartzite Outwash

Arizo and similar soils

Composition: 0 to 3 percent
 Slope: 2 to 8 percent
 Landform: Drainageways
 Typical vegetation: White bursage, cattle saltbush, white burrobrush, creosotebush, Indian ricegrass, bladdersage, desert needlegrass
 Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Lastchance and similar soils

Composition: 0 to 3 percent
 Slope: 2 to 8 percent
 Landform: Fan remnants

Typical vegetation: Spiny menodora, creosotebush, white bursage, range ratany
 Ecological site: 030XA071NV--Cobbly Claypan 5-7 P.Z.

Irongold and similar soils

Composition: 0 to 3 percent

Slope: 4 to 15 percent

Landform: Fan remnants

Typical vegetation: Bush muhly, desert needlegrass, creosotebush, big galleta, Nevada ephedra, blackbrush

Ecological site: 030XB029NV--Shallow Gravelly Loam 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

1317--Commski-Lastchance association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,800 to 4,100

Precipitation: 4 to 7 inches

Air temperature: 57 to 64 degrees Fahrenheit

Frost-free period: 180 to 250 days

Composition

Commski very gravelly fine sandy loam, 2 to 8 percent slopes--70 percent

Lastchance extremely gravelly loam, 2 to 8 percent slopes--15 percent

Arizo very gravelly loamy sand, 2 to 8 percent slopes--9 percent

Commski very gravelly fine sandy loam, 0 to 2 percent slopes--3 percent

Lastchance extremely cobbly fine sandy loam, 2 to 8 percent slopes--3 percent

Component Description

Commski and similar soils

Landform: Inset fans

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Range ratany, desert needlegrass, Indian ricegrass, creosotebush, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam

Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Medium

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-7 P.Z.

Component Description

Lastchance and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White bursage, creosotebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 10 percent cobbles, 60 percent gravel

Layer 1--0 to 2 inches; extremely gravelly loam

Layer 2--2 to 20 inches; very gravelly loam

Layer 3--20 to 60 inches; cemented material

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Depth to restrictive feature: Petrocalcic: 20 to 39 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Arizo and similar soils**

Composition: 0 to 9 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: White bursage, cattle saltbush, white burrobrush, creosotebush, Indian ricegrass, bladdersage, desert needlegrass

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Commski and similar soils

Composition: 0 to 3 percent

Slope: 0 to 2 percent

Landform: Inset fans

Typical vegetation: Desert needlegrass, Indian ricegrass, white bursage, creosotebush

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Lastchance and similar soils

Composition: 0 to 3 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: White bursage, range ratany, spiny menodora, creosotebush

Ecological site: 030XA071NV--Cobbly Claypan 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

1320--Boxspring-Zeheme-Rock outcrop association***Map Unit Setting***

MLRA: 30

Landscape: Mountains

Elevation: 4,200 to 5,700

Precipitation: 7 to 10 inches

Air temperature: 55 to 62 degrees Fahrenheit

Frost-free period: 160 to 200 days

Composition

Boxspring extremely gravelly loam, 15 to 50 percent slopes--50 percent

Zeheme very stony fine sandy loam, 15 to 50 percent slopes--25 percent

Rock outcrop--15 percent

Zeheme extremely stony fine sandy loam, 15 to 50 percent slopes--8 percent

Irongold extremely gravelly loam, 4 to 15 percent slopes--2 percent

Component Description**Boxspring and similar soils**

Landform: Backslopes of mountains

Parent material: Colluvium derived from limestone and dolomite

Typical vegetation: Desert bitterbrush, Nevada ephedra, blackbrush, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 15 percent cobbles, 50 percent gravel

Layer 1--0 to 2 inches; extremely gravelly loam

Layer 2--2 to 15 inches; extremely gravelly loam

Layer 3--15 to 25 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 14 to 20 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.5 inches

Present flooding: None

Present ponding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY077NV--Shallow Gravelly Loam 8-10 P.Z.

Component Description**Zeheme and similar soils**

Landform: Backslopes of mountains

Parent material: Colluvium residuum weathered from limestone

Typical vegetation: Blackbrush, snakeweed, desert needlegrass, Utah agave, creosotebush, Anderson wolfberry, winterfat, green ephedra, Mexican cliffrose, range ratany

Typical profile:

Surface rock fragments: About 15 percent stones, 15 percent cobbles, 25 percent gravel

Layer 1--0 to 2 inches; very stony fine sandy loam

Layer 2--2 to 13 inches; very gravelly fine sandy loam

Layer 3--13 to 23 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 7 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 1.0 inches

Present flooding: None

Present ponding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB068NV--Limestone Hill 5-7 P.Z.

Component Description

Rock outcrop

Landform: Cliffs

Component Properties and Qualities

Slope: 15 to 50

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Zeheme and similar soils

Composition: 0 to 8 percent

Slope: 15 to 50 percent

Landform: Mountains

Typical vegetation: Blackbrush, creosotebush, desert needlegrass, ephedra

Ecological site: 030XB030NV--Shallow Limestone

Slope 5-7 P.Z.

Irongold and similar soils

Composition: 0 to 2 percent

Slope: 4 to 15 percent

Landform: Fan remnants

Typical vegetation: Creosotebush, big galleta, Nevada ephedra, blackbrush, bush muhly, desert needlegrass

Ecological site: 030XB029NV--Shallow Gravelly Loam 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

1321--Boxspring-Seralin-Rock outcrop association

Map Unit Setting

MLRA: 30

Landscape: Mountains

Elevation: 4,200 to 7,500

Precipitation: 8 to 12 inches

Air temperature: 52 to 57 degrees Fahrenheit

Frost-free period: 130 to 180 days

Composition

Boxspring extremely gravelly loam, 30 to 75 percent slopes--40 percent

Seralin extremely gravelly very fine sandy loam, 30 to 75 percent slopes--30 percent

Rock outcrop--15 percent

Lithic Calciustolls extremely gravelly very fine sandy loam, 15 to 50 percent slopes--9 percent

Typic Haplustolls extremely gravelly very fine sandy loam, 15 to 30 percent slopes--6 percent

Component Description

Boxspring and similar soils

Landform: Mountains

Parent material: Colluvium derived from limestone over residuum weathered from limestone

Typical vegetation: Blackbrush, desert bitterbrush, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 15 percent cobbles, 50 percent gravel

Layer 1--0 to 2 inches; extremely gravelly loam

Layer 2--2 to 15 inches; extremely gravelly loam

Layer 3--15 to 25 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 14 to 20 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY077NV--Shallow Gravelly Loam 8-10 P.Z.

Component Description

Seralin and similar soils

Landform: Mountains

Parent material: Colluvium derived from limestone over residuum weathered from limestone

Typical vegetation: Curleaf mountainmahogany, Stansbury cliffrose, green ephedra, eriogonum, yellowleaf silktassel, Utah juniper, singleleaf pinyon, muttongrass, Sandberg bluegrass, Gambel oak, turbinella oak, needlegrass

Typical profile:

Surface rock fragments: About 10 percent cobbles, 2 percent stones, 65 percent gravel

Layer 1--0 to 2 inches; extremely gravelly very fine sandy loam

Layer 2--2 to 7 inches; very gravelly loam

Layer 3--7 to 14 inches; very gravelly loam

Layer 4--14 to 20 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 14 to 20 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.1 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY135NV--PIMO-JUOS WSG: ORO507

Component Description

Rock outcrop

Landform: Mountains

Component Properties and Qualities

Slope: 30 to 75

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Lithic Calciustolls and similar soils

Composition: 0 to 9 percent

Classification: Loamy-skeletal, carbonatic, mesic

Lithic Calciustolls

Slope: 15 to 50 percent

Landform: Mountains

Typical vegetation: Curleaf mountainmahogany, Stansbury cliffrose, green ephedra, eriogonum, yellowleaf silktassel, Utah juniper, singleleaf pinyon, muttongrass, Sandberg bluegrass, Gambel oak, turbinella oak, needlegrass

Ecological site: 029XY135NV--PIMO-JUOS WSG: ORO507

Typic Haplustolls and similar soils

Composition: 0 to 6 percent

Classification: Loamy-skeletal, mixed, superactive, mesic Typic Haplustolls

Slope: 15 to 30 percent

Landform: Toeslopes of mountains

Typical vegetation: Desert bitterbrush, Stansbury cliffrose, green ephedra, eriogonum, skunkbush sumac, Utah juniper, singleleaf pinyon, muttongrass, blue grama, Fremont barberry, banana yucca, black grama

Ecological site: 029XY126NV--PIMO-JUOS WSG: ORO507

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

1340--Longjim-Niavi association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,400 to 4,400

Precipitation: 6 to 9 inches
Air temperature: 57 to 62 degrees Fahrenheit
Frost-free period: 200 to 250 days

Composition

Longjim extremely gravelly fine sandy loam, 4 to 15 percent slopes--70 percent
Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--15 percent
Longjim Family extremely gravelly fine sandy loam, 4 to 15 percent slopes--5 percent
Wechech extremely gravelly fine sandy loam, 4 to 15 percent slopes--5 percent
Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--3 percent
Dedas Family very gravelly sandy loam, 4 to 30 percent slopes--2 percent

Component Description

Longjim and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Mojave buckwheat, Indian ricegrass, desert needlegrass, ephedra, blackbrush, white bursage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel
Layer 1--0 to 3 inches; extremely gravelly fine sandy loam
Layer 2--3 to 8 inches; gravelly loam
Layer 3--8 to 16 inches; very gravelly sandy loam
Layer 4--16 to 20 inches; indurated
Layer 5--20 to 45 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
Runoff: Very high
Depth to restrictive feature: Duripan: 14 to 20 inches
Permeability class (root zone): Moderate
Available water capacity: About 1.2 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA093NV--Quartzite Fan 5-7 P.Z.

Component Description

Niavi and similar soils

Landform: Stream terraces
Parent material: Alluvium derived from quartzite
Typical vegetation: Ephedra, creosotebush, Virgin River encelia, Mojave buckwheat, white bursage, big galleta, range ratany, Anderson's wolfberry

Typical profile:

Surface rock fragments: About 1 percent stones, 35 percent cobbles, 40 percent gravel
Layer 1--0 to 2 inches; extremely cobbly fine sandy loam
Layer 2--2 to 8 inches; extremely gravelly coarse sandy loam
Layer 3--8 to 29 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam
Layer 4--29 to 60 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
Runoff: Very low
Permeability class (root zone): Moderately rapid
Available water capacity: About 2 inches
Present flooding: Occasional
Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XB134NV--Quartzite Outwash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Longjim Family and similar soils

Composition: 0 to 5 percent
Classification: Loamy-skeletal, mixed, superactive, thermic, shallow Typic Haplodurids
Slope: 4 to 15 percent
Landform: Fan remnants
Typical vegetation: Blackbrush, white bursage, creosotebush, Anderson wolfberry, big galleta, desert needlegrass
Ecological site: 030XB076NV--Shallow Gravelly Slope 5-7 P.Z.

Wechech and similar soils

Composition: 0 to 5 percent

Slope: 4 to 15 percent

Landform: Fan remnants

Typical vegetation: Ephedra, Indian ricegrass, creosotebush, range ratany, white bursage, big galleta, winterfat

Ecological site: 030XB102NV--Gravelly Loam 5-7 P.Z.

Niavi rarely flooded and similar soils

Composition: 0 to 3 percent

Slope: 2 to 8 percent

Landform: Stream terraces

Typical vegetation: Big galleta, winterfat, blackbrush, Shockley's goldenhead, desert needlegrass

Ecological site: 030XB108NV--Gravelly Inset Fan 7-9 P.Z.

Dedas Family and similar soils

Composition: 0 to 2 percent

Classification: Loamy-skeletal, mixed, superactive, thermic, shallow Typic Argidurids

Slope: 4 to 30 percent

Landform: Rock pediments

Typical vegetation: Creosotebush, blackbrush, white bursage, big galleta, Anderson wolfberry, desert needlegrass

Ecological site: 030XB076NV--Shallow Gravelly Slope 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

1871--Irongold-Weiser association**Map Unit Setting**

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,400 to 4,600

Precipitation: 5 to 7 inches

Air temperature: 57 to 66 degrees Fahrenheit

Frost-free period: 180 to 240 days

Composition

Irongold extremely gravelly loam, 2 to 8 percent slopes--45 percent

Irongold extremely gravelly loam, 8 to 15 percent slopes--25 percent

Weiser gravelly very fine sandy loam, 2 to 8 percent slopes--15 percent

Wechech gravelly fine sandy loam, 2 to 8 percent slopes--6 percent

Purob very gravelly sandy loam, 8 to 15 percent slopes--5 percent

Wechech very gravelly sandy loam, 2 to 8 percent slopes--2 percent

Typic Torriorthents extremely gravelly coarse sandy loam, 2 to 8 percent slopes--2 percent

Component Description**Irongold and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone

Typical vegetation: Blackbrush, Nevada ephedra, creosotebush, bush muhly, desert needlegrass, big galleta

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 65 percent gravel

Layer 1--0 to 1 inches; extremely gravelly loam

Layer 2--1 to 7 inches; gravelly loam

Layer 3--7 to 11 inches; gravelly loam

Layer 4--11 to 34 inches; cemented

Layer 5--34 to 60 inches; extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very high

Depth to restrictive feature: Petrocalcic: 10 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.3 inches

Present flooding: None

Present ponding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB029NV--Shallow Gravelly Loam 5-7 P.Z.

Component Description**Irongold and similar soils**

Landform: Ballenas

Parent material: Alluvium derived from limestone

Typical vegetation: Nevada ephedra, big galleta, bush muhly, desert needlegrass, blackbrush, creosotebush

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 65 percent gravel

Layer 1--0 to 1 inches; extremely gravelly loam

Layer 2--1 to 7 inches; gravelly loam

Layer 3--7 to 11 inches; gravelly loam

Layer 4--11 to 34 inches; cemented

Layer 5--34 to 60 inches; extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Very high

Depth to restrictive feature: Petrocalcic: 10 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.3 inches

Present flooding: None

Present ponding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB029NV--Shallow Gravelly Loam 5-7 P.Z.

Component Description

Weiser and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from limestone

Typical vegetation: Winterfat, big galleta, range ratany, creosotebush, spiny menodora, Indian ricegrass, ephedra, white bursage

Typical profile:

Surface rock fragments: About 10 percent cobbles, 55 percent gravel

Layer 1--0 to 6 inches; gravelly very fine sandy loam

Layer 2--6 to 10 inches; extremely gravelly loam

Layer 3--10 to 42 inches; extremely gravelly sandy loam

Layer 4--42 to 60 inches; extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Medium

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Present ponding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB102NV--Gravelly Loam 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Wechech and similar soils

Composition: 0 to 6 percent

Slope: 2 to 8 percent

Landform: Summits of partial ballenas

Typical vegetation: Blackbrush, big galleta, winterfat, Indian ricegrass

Ecological site: 030XB107NV--Coarse Gravelly Loam 5-7 P.Z.

Purob and similar soils

Composition: 0 to 5 percent

Slope: 8 to 15 percent

Landform: Backslopes of partial ballenas

Typical vegetation: Blackbrush, Nevada ephedra, desert bitterbrush, desert needlegrass

Ecological site: 029XY077NV--Shallow Gravelly Loam 8-10 P.Z.

Wechech and similar soils

Composition: 0 to 2 percent

Slope: 2 to 8 percent

Landform: Summits of fan remnants

Typical vegetation: White bursage, ratany, creosotebush

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Typic Torriorthents and similar soils

Composition: 0 to 2 percent

Classification: Loamy-skeletal, carbonatic, thermic

Typic Torriorthents

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Desertwillow, Nevada ephedra, buckwheat, white burrobush, creosotebush, baccharis, catclaw

Ecological site: 030XB028NV--Valley Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

2002--Rock outcrop-Upspring-Rubble land complex, 8 to 75 percent slopes

Map Unit Setting

MLRA: 30
Landscape: Hills
Elevation: 3,500 to 4,000
Precipitation: 4 to 6 inches
Air temperature: 57 to 64 degrees Fahrenheit
Frost-free period: 240 to 270 days

Composition

Rock outcrop--45 percent
Upspring very gravelly sandy loam, 8 to 75 percent slopes--30 percent
Rubble land fragmental material, 30 to 75 percent slopes--15 percent
Haleburu Family extremely gravelly sandy loam, 8 to 50 percent slopes--10 percent

Component Description

Rock outcrop
Landform: Hills

Component Properties and Qualities

Slope: 8 to 75

Interpretive Groups

Nonirrigated land capability: Not determined
Ecological site: None assigned

Component Description

Upspring and similar soils

Landform: Hills
Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: White bursage, shadscale, ephedra, white burrobrush, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel
Layer 1--0 to 8 inches; very gravelly sandy loam
Layer 2--8 to 12 inches; very gravelly fine sandy loam
Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 75 percent
Runoff: Very high
Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches
Permeability class (root zone): Moderately rapid
Available water capacity: About 0.7 inches
Present flooding: None
Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA067NV--Limy Hill 3-5 P.Z.

Component Description

Rubble land
Landform: Hills

Component Properties and Qualities

Slope: 30 to 75 percent
Runoff: Low
Depth to restrictive feature: Bedrock (lithic): 40 to 60 inches

Interpretive Groups

Nonirrigated land capability: 8s
Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Haleburu Family and similar soils

Composition: 0 to 10 percent
Classification: Loamy-skeletal, mixed, superactive, calcareous, thermic Lithic Torriorthents
Slope: 8 to 50 percent
Landform: Hills
Typical vegetation: Shadscale, creosotebush, Indian ricegrass, white bursage
Ecological site: 030XA056NV--Loamy Hill 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

2004--Rock outcrop-Zyplar association***Map Unit Setting***

MLRA: 30
 Landscape: Hills
 Elevation: 3,500 to 4,500
 Precipitation: 5 to 8 inches
 Air temperature: 57 to 63 degrees Fahrenheit
 Frost-free period: 210 to 230 days

Composition

Rock outcrop--55 percent
 Zyplar gravelly sandy loam, 15 to 50 percent slopes--30 percent
 Gabbvally very stony loam, 8 to 15 percent slopes--10 percent
 Xeric Torriorthents very gravelly sandy loam, 2 to 8 percent slopes--5 percent

Component Description

Rock outcrop
 Landform: Hills

Component Properties and Qualities
 Slope: 15 to 50

Interpretive Groups

Nonirrigated land capability: Not determined
 Ecological site: None assigned

Component Description**Zyplar and similar soils**

Landform: Hills
 Parent material: Residuum weathered from tuff
 Typical vegetation: White bursage, fourwing saltbush, blackbrush, Nevada ephedra, white burrobrush, range ratany, creosotebush, wolfberry, spiny menodora, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: 5 percent stones, 10 percent cobbles, 40 percent gravel
 Layer 1--0 to 7 inches; gravelly sandy loam
 Layer 2--7 to 12 inches; gravelly clay loam
 Layer 3--12 to 16 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 9 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7e

Ecological site: 030XA095NV--Shallow Gravelly Slope 8-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Gabbvally and similar soils**

Composition: 0 to 10 percent

Slope: 8 to 15 percent

Landform: Hills

Typical vegetation: Winterfat, galleta, other perennial forbs, Indian ricegrass, desert needlegrass, Wyoming big sagebrush, Douglas rabbitbrush, bottlebrush squirreltail, Nevada ephedra, spiny hopsage

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Xeric Torriorthents and similar soils

Composition: 0 to 5 percent

Classification: Loamy-skeletal, mixed, superactive, calcareous, mesic, shallow Xeric Torriorthents

Slope: 2 to 8 percent

Landform: Hills

Typical vegetation: Galleta, Indian ricegrass, desert needlegrass, Wyoming big sagebrush, fourwing saltbush, Nevada ephedra, spiny hopsage

Ecological site: 029XY006NV--Loamy 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2005--Rock outcrop-St. Thomas association***Map Unit Setting***

MLRA: 30

Landscape: Hills

Elevation: 3,000 to 4,500

Precipitation: 3 to 5 inches

Air temperature: 59 to 67 degrees Fahrenheit
Frost-free period: 200 to 250 days

Composition

Rock outcrop--50 percent
St. Thomas very cobbly fine sandy loam, 15 to 30 percent slopes--20 percent
St. Thomas very cobbly fine sandy loam, 15 to 30 percent slopes--15 percent
Weiser very gravelly sandy loam, 2 to 8 percent slopes--5 percent
Arizo very gravelly loamy sand, 2 to 8 percent slopes--5 percent
Typic Haplocalcids very gravelly sandy loam, 4 to 30 percent slopes--3 percent
Yermo very gravelly sandy loam, 2 to 4 percent slopes--2 percent

Component Description

Rock outcrop
Landform: Hills

Component Properties and Qualities
Slope: 15 to 30

Interpretive Groups
Nonirrigated land capability: Not determined
Ecological site: None assigned

Component Description

St. Thomas and similar soils
Landform: Hills
Parent material: Colluvium derived from limestone over residuum weathered from limestone
Typical vegetation: White bursage, Nevada ephedra, big galleta, range ratany, creosotebush, Indian ricegrass

Typical profile:
Surface rock fragments: About 6 percent stones, 18 percent cobbles, 25 percent gravel
Layer 1--0 to 3 inches; very cobbly fine sandy loam
Layer 2--3 to 12 inches; extremely gravelly loam
Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities
Slope: 15 to 30 percent
Runoff: Very high
Depth to restrictive feature: Bedrock (lithic): 4 to 20 inches

Permeability class (root zone): Moderately rapid
Available water capacity: About 0.7 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XB017NV--Limy Hill 3-5 P.Z.

Component Description

St. Thomas and similar soils

Landform: Hills
Parent material: Colluvium derived from limestone over residuum weathered from limestone
Typical vegetation: White bursage, Nevada ephedra, big galleta, range ratany, creosotebush, Indian ricegrass, Mohave yucca

Typical profile:

Surface rock fragments: About 6 percent stones, 18 percent cobbles, 25 percent gravel
Layer 1--0 to 2 inches; very cobbly fine sandy loam
Layer 2--2 to 12 inches; extremely gravelly loam
Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent
Runoff: Very high
Depth to restrictive feature: Bedrock (lithic): 4 to 20 inches
Permeability class (root zone): Moderately rapid
Available water capacity: About 0.7 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XB001NV--Limy Hill 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Weiser and similar soils

Composition: 0 to 5 percent
Slope: 2 to 8 percent
Landform: Fan remnants
Typical vegetation: Creosotebush, range ratany, white bursage
Ecological site: 030XB019NV--Limy 3-5 P.Z.

Arizo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Inset fans

Typical vegetation: White bursage, cattle saltbush, white burrobrush, creosotebush, Indian ricegrass

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Typic Haplocalcids and similar soils

Composition: 0 to 3 percent

Classification: Coarse-loamy, mixed, superactive, thermic Typic Haplocalcids

Slope: 4 to 30 percent

Landform: Fan remnants

Typical vegetation: White bursage, creosotebush, range ratany

Ecological site: 030XB019NV--Limy 3-5 P.Z.

Yermo and similar soils

Composition: 0 to 2 percent

Slope: 2 to 4 percent

Landform: Fan skirts

Typical vegetation: Shadscale, creosotebush, Indian ricegrass, white bursage

Ecological site: 030XA056NV--Loamy Hill 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2010--Longjim gravelly fine sandy loam, 4 to 15 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,500 to 4,200

Precipitation: 3 to 5 inches

Air temperature: 61 to 64 degrees Fahrenheit

Frost-free period: 210 to 250 days

Composition

Longjim gravelly fine sandy loam, 4 to 15 percent slopes--90 percent

Typic Torriorthents very gravelly sandy loam, 2 to 8 percent slopes--10 percent

Component Description

Longjim and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, white bursage, blackbrush, Nevada ephedra, creosotebush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel

Layer 1--0 to 3 inches; gravelly fine sandy loam

Layer 2--3 to 8 inches; gravelly loam

Layer 3--8 to 16 inches; very gravelly sandy loam

Layer 4--16 to 20 inches; indurated

Layer 5--20 to 45 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 14 to 20 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA094NV--Shallow Gravelly Loam 8-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Typic Torriorthents and similar soils

Composition: 0 to 10 percent

Classification: Loamy-skeletal, mixed, superactive, calcareous, thermic Typic Torriorthents

Slope: 2 to 8 percent

Landform: Inset fans

Typical vegetation: White bursage, shadscale, ephedra, big galleta, creosotebush, wolfberry, Indian ricegrass

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2011--Sanwell, warm-Sanwell complex, 0 to 4 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Bolson
 Elevation: 2,300 to 2,700
 Precipitation: 3 to 5 inches
 Air temperature: 63 to 70 degrees Fahrenheit
 Frost-free period: 210 to 230 days

Composition

Sanwell gravelly fine sandy loam, 0 to 4 percent slopes--45 percent
 Sanwell gravelly fine sandy loam, 0 to 2 percent slopes--40 percent
 Corbilt gravelly fine sandy loam, 0 to 4 percent slopes--5 percent
 Wanomie very gravelly sandy loam, 0 to 2 percent slopes--5 percent
 Bluepoint loamy fine sand, 0 to 4 percent slopes--5 percent

Component Description

Sanwell and similar soils

Landform: Alluvial flats
 Parent material: Lacustrine deposits
 Typical vegetation: White bursage, shadscale, range ratany, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 9 inches; gravelly fine sandy loam
 Layer 2--9 to 16 inches; gravelly fine sandy loam
 Layer 3--16 to 31 inches; very gravelly sandy loam
 Layer 4--31 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: Low
 Permeability class (root zone): Moderate
 Sodicity: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description

Sanwell and similar soils

Landform: Alluvial flats
 Parent material: Lacustrine deposits
 Typical vegetation: White bursage, shadscale, creosotebush, wolfberry, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 9 inches; gravelly fine sandy loam
 Layer 2--9 to 16 inches; gravelly fine sandy loam
 Layer 3--16 to 31 inches; very gravelly coarse sandy loam
 Layer 4--31 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Low
 Permeability class (root zone): Moderate
 Sodicity: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Corbilt and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 4 percent
 Landform: Fan skirts
 Typical vegetation: Indian ricegrass, desert needlegrass, creosotebush, white bursage, Nevada ephedra, range ratany
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Wanomie and similar soils

Composition: 0 to 5 percent

Slope: 0 to 2 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, desert needlegrass, shadscale, creosotebush, white bursage, wolfberry

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Bluepoint and similar soils

Composition: 0 to 5 percent

Slope: 0 to 4 percent

Landform: Sand sheets

Typical vegetation: White bursage, fourwing saltbush, winterfat, creosotebush, Indian ricegrass, sand dropseed, desert needlegrass

Ecological site: 030XA069NV--Limy Sand 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2012--Zalda-Greyeagle-Upspring association**Map Unit Setting**

MLRA: 30

Landscape: Hills

Elevation: 3,000 to 4,000

Precipitation: 3 to 6 inches

Air temperature: 61 to 64 degrees Fahrenheit

Frost-free period: 210 to 260 days

Composition

Zalda gravelly sandy loam, 2 to 8 percent slopes--45 percent

Greyeagle very gravelly sandy loam, 15 to 30 percent slopes--30 percent

Upspring very gravelly sandy loam, 8 to 15 percent slopes--15 percent

Lealandic very gravelly sandy loam, 2 to 15 percent slopes--4 percent

Haleburu Family extremely gravelly sandy loam, 2 to 15 percent slopes--3 percent

Rock outcrop--3 percent

Component Description**Zalda and similar soils**

Landform: Hills

Parent material: Residuum weathered from volcanic rocks

Typical vegetation: White bursage, shadscale, ephedra, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 7 inches; loam

Layer 3--7 to 8 inches; indurated

Layer 4--8 to 18 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 7 to 14 inches

Bedrock (lithic): 8 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.8 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA059NV--Gravelly Hill 5-8 P.Z.

Component Description**Greyeagle and similar soils**

Landform: Hills

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, shadscale, Nevada ephedra, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, 2 percent cobbles, about 60 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 6 inches; gravelly sandy loam

Layer 3--6 to 8 inches; very gravelly sandy loam

Layer 4--8 to 24 inches; indurated

Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.6 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Component Description**Upspring and similar soils**

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: White bursage, shadscale, ephedra, winterfat, creosotebush, spiny menodora, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 2 inches; very gravelly sandy loam
 Layer 2--2 to 12 inches; very gravelly fine sandy loam
 Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.8 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA068NV--Calcareous Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Lealandic and similar soils**

Composition: 0 to 4 percent
 Slope: 2 to 15 percent
 Landform: Fan remnants
 Typical vegetation: White bursage, shadscale, ephedra, creosotebush, wolfberry, Indian ricegrass, desert needlegrass
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Haleburu Family and similar soils

Composition: 0 to 3 percent
 Classification: Loamy-skeletal, mixed, superactive, calcareous, thermic Lithic Torriorthents
 Slope: 2 to 15 percent
 Landform: Hills
 Typical vegetation: Creosotebush, white bursage, other annual forbs, other annual grasses, Indian ricegrass, desert needlegrass, shadscale, Nevada ephedra, other perennial forbs, other perennial grasses
 Ecological site: 030XA054NV--Limy Hill 5-8 P.Z.

Rock outcrop

Composition: 0 to 3 percent
 Landform: Hills
 Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2013--Longjim-Yurm association***Map Unit Setting***

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 3,300 to 4,500
 Precipitation: 5 to 9 inches
 Air temperature: 61 to 68 degrees Fahrenheit
 Frost-free period: 200 to 250 days

Composition

Longjim extremely gravelly fine sandy loam, 4 to 15 percent slopes--45 percent
 Yurm very gravelly sandy loam, 4 to 15 percent slopes--40 percent
 Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--5 percent

Irongold extremely gravelly loam, 8 to 30 percent slopes--4 percent
 Zibate extremely gravelly sandy loam, 8 to 30 percent slopes--4 percent
 Yurm extremely cobbly fine sandy loam, 4 to 8 percent slopes--2 percent

Component Description

Longjim and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Indian ricegrass, white bursage, blackbrush, ephedra, desert needlegrass, Mojave buckwheat

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 3 inches; extremely gravelly fine sandy loam
 Layer 2--3 to 8 inches; gravelly loam
 Layer 3--8 to 16 inches; very gravelly sandy loam
 Layer 4--16 to 20 inches; indurated
 Layer 5--20 to 45 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 14 to 20 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 1.2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA093NV--Quartzite Fan 5-7 P.Z.

Component Description

Yurm and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Winterfat, creosotebush, desert needlegrass, white bursage

Typical profile:

Surface rock fragments: About 3 percent cobbles, 70 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 16 inches; very gravelly sandy loam
 Layer 3--16 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 10 to 20 inches
 Permeability class (root zone): Moderately rapid
 Salinity: Saline within 40 inches
 Available water capacity: About 1.0 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA007NV--Gravelly Loam 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Niavi and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 8 percent
 Landform: Stream terraces
 Typical vegetation: Mojave buckwheat, big galleta, range ratany, ephedra, white bursage, Anderson's wolfberry, creosotebush, Virgin River encelia
 Ecological site: 030XB134NV--Quartzite Outwash

Irongold and similar soils

Composition: 0 to 4 percent
 Slope: 8 to 30 percent
 Landform: Partial ballenas
 Typical vegetation: Blackbrush, Nevada ephedra, big galleta, creosotebush, desert needlegrass, bush muhly
 Ecological site: 030XB029NV--Shallow Gravelly Loam 5-7 P.Z.

Zibate and similar soils

Composition: 0 to 4 percent
 Slope: 8 to 30 percent, north to east aspects
 Landform: Rock pediments
 Typical vegetation: Blackbrush, desert needlegrass, Nevada ephedra, creosotebush, big galleta

Ecological site: 030XB076NV--Shallow Gravelly Slope 5-7 P.Z.

Yurm and similar soils

Composition: 0 to 2 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: Creosotebush, desert needlegrass, white bursage, spiny menodora

Ecological site: 030XA071NV--Cobbly Claypan 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2020--Weiser-Canoto association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,500 to 3,800

Precipitation: 5 to 8 inches

Air temperature: 61 to 68 degrees Fahrenheit

Frost-free period: 200 to 260 days

Composition

Weiser very gravelly sandy loam, 2 to 4 percent slopes--70 percent

Canoto very gravelly sandy loam, 2 to 4 percent slopes--25 percent

Wechech very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Weiser and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White bursage, Nevada ephedra, big galleta, range ratany, creosotebush, other shrubs

Typical profile:

Surface rock fragments: About 10 percent cobbles, 55 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified very gravelly fine sandy loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Component Description

Canoto and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, shadscale, ephedra, big galleta, creosotebush, wolfberry, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 50 percent gravel

Layer 1--0 to 11 inches; very gravelly sandy loam

Layer 2--11 to 60 inches; stratified gravelly loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Wechech and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Summits of fan remnants

Typical vegetation: Creosotebush, white bursage, big galleta, Indian ricegrass, shadscale, ephedra, wolfberry

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2021--Weiser-Nickel association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,000 to 3,800

Precipitation: 4 to 7 inches

Air temperature: 61 to 68 degrees Fahrenheit

Frost-free period: 200 to 250 days

Composition

Weiser very gravelly sandy loam, 2 to 4 percent slopes--70 percent

Nickel gravelly fine sandy loam, 4 to 15 percent slopes--25 percent

Wechech very gravelly sandy loam, 2 to 4 percent slopes--3 percent

Arizo very gravelly loamy sand, 2 to 4 percent slopes--2 percent

Component Description

Weiser and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White bursage, Nevada ephedra, big galleta, range ratany, creosotebush, other shrubs

Typical profile:

Surface rock fragments: About 10 percent cobbles, 55 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified very gravelly fine sandy loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Component Description

Nickel and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, ephedra, big galleta, creosotebush, Indian ricegrass, yucca

Typical profile:

Surface rock fragments: About 1 percent cobbles, 50 percent gravel

Layer 1--0 to 7 inches; gravelly fine sandy loam

Layer 2--7 to 19 inches; extremely gravelly sandy loam

Layer 3--19 to 60 inches; extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: High

Permeability class (root zone): Moderately slow

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Wechech and similar soils**

Composition: 0 to 3 percent

Slope: 2 to 4 percent

Landform: Summits of fan remnants

Typical vegetation: Creosotebush, white bursage, big galleta, Indian ricegrass, shadscale, ephedra, wolfberry

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Arizo and similar soils

Composition: 0 to 2 percent

Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: White burrobrush, white bursage, cattle saltbush, creosotebush, Indian ricegrass, bladdersage, desert needlegrass

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2023--Commski-Sezna association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,400 to 4,000

Precipitation: 3 to 8 inches

Air temperature: 58 to 70 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Commski very gravelly fine sandy loam, 8 to 30 percent slopes--35 percent

Commski very gravelly fine sandy loam, 2 to 8 percent slopes--30 percent

Sezna gravelly sandy loam, 2 to 4 percent slopes--20 percent

Yermo very gravelly sandy loam, 2 to 8 percent slopes--8 percent

Rock outcrop--7 percent

Component Description**Commski and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White bursage, range ratany, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam
Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 30 percent

Runoff: Medium

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description**Commski and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White bursage, shadscale, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam
Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Medium

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Component Description

Sezna and similar soils

Landform: Ballenas
Parent material: Alluvium derived from limestone and dolomite
Typical vegetation: White bursage, shadscale, rabbitbrush, Nevada ephedra, white burrobrush, range ratany, creosotebush, Anderson wolfberry, Indian ricegrass, bladdersage, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 1 percent cobbles, 60 percent gravel
Layer 1--0 to 3 inches; gravelly sandy loam
Layer 2--3 to 18 inches; very cobbly clay loam
Layer 3--18 to 60 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
Runoff: Very high
Depth to restrictive feature: Petrocalcic: 10 to 20 inches
Permeability class (root zone): Moderately slow
Available water capacity: About 1.6 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA058NV--Limy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yermo and similar soils

Composition: 0 to 8 percent
Slope: 2 to 8 percent
Landform: Inset fans
Typical vegetation: White bursage, range ratany, creosotebush, Indian ricegrass, desert needlegrass

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Rock outcrop

Composition: 0 to 7 percent
Landform: Pediments
Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

2030--Corbilt gravelly fine sandy loam, warm, 2 to 4 percent slopes

Map Unit Setting

MLRA: 30
Landscape: Fan piedmont
Elevation: 2,400 to 2,800
Precipitation: 3 to 5 inches
Air temperature: 61 to 68 degrees Fahrenheit
Frost-free period: 200 to 220 days

Composition

Corbilt gravelly fine sandy loam, 2 to 4 percent slopes--85 percent
Yermo very gravelly sandy loam, 2 to 4 percent slopes--10 percent
Wanomie very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Corbilt and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: White bursage, white burrobrush, creosotebush, desert alysum, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel
Layer 1--0 to 4 inches; gravelly fine sandy loam
Layer 2--4 to 32 inches; gravelly fine sandy loam
Layer 3--32 to 56 inches; very gravelly sandy loam
Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very low
 Depth to restrictive feature: Duripan: 40 to 60 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 6 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Yermo and similar soils**

Composition: 0 to 10 percent
 Slope: 2 to 4 percent
 Landform: Fan skirts
 Typical vegetation: Indian ricegrass, desert needlegrass, white bursage, white burrobrush, creosotebush, desert alysum
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Wanomie and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 4 percent
 Landform: Fan remnants
 Typical vegetation: Creosotebush, white bursage, Indian ricegrass, desert needlegrass, white burrobrush, desert alysum
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2031--Corbilt-Skelon association***Map Unit Setting***

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,400 to 2,800
 Precipitation: 3 to 5 inches
 Air temperature: 61 to 63 degrees Fahrenheit
 Frost-free period: 200 to 240 days

Composition

Corbilt gravelly fine sandy loam, 4 to 8 percent slopes--60 percent
 Skelon gravelly sandy loam, 4 to 8 percent slopes--35 percent
 Yermo very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description**Corbilt and similar soils**

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: White bursage, white burrobrush, creosotebush, desert alysum, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel
 Layer 1--0 to 4 inches; gravelly fine sandy loam
 Layer 2--4 to 32 inches; gravelly fine sandy loam
 Layer 3--32 to 56 inches; very gravelly sandy loam
 Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
 Runoff: Low
 Depth to restrictive feature: Duripan: 40 to 60 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 6 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description**Skelon and similar soils**

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: White bursage, white burrobrush, creosotebush, desert alysum, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; gravelly sandy loam
 Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam
 Layer 3--28 to 44 inches; indurated
 Layer 4--44 to 52 inches; very gravelly sandy loam
 Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 20 to 40 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yermo and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 4 percent
 Landform: Inset fans
 Typical vegetation: White bursage, shadscale, creosotebush, wolfberry, Indian ricegrass, desert needlegrass
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2040--Yurm-Canoto association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 3,600 to 4,200
 Precipitation: 3 to 6 inches

Air temperature: 61 to 68 degrees Fahrenheit
 Frost-free period: 200 to 220 days

Composition

Yurm very gravelly sandy loam, 2 to 8 percent slopes--70 percent
 Canoto very gravelly sandy loam, 2 to 4 percent slopes--15 percent
 Yurm very gravelly sandy loam, 2 to 8 percent slopes--10 percent
 Arizo very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Yurm and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Shadscale, creosotebush, Indian ricegrass

Typical profile:

Surface rock fragments: About 3 percent cobbles, 70 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 16 inches; very gravelly sandy loam
 Layer 3--16 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 10 to 20 inches
 Permeability class (root zone): Moderately rapid
 Salinity: Saline within 40 inches
 Available water capacity: About 1.0 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA047NV--Barren Fan 3-8 P.Z.

Component Description

Canoto and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: White bursage, shadscale, ephedra, big galleta, creosotebush, wolfberry, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 11 inches; very gravelly sandy loam
 Layer 2--11 to 60 inches; stratified gravelly loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 030XB005NV--Limy 5-7 P.Z.

Component Description**Yurm moist and similar soils**

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: White bursage, shadscale, ephedra, creosotebush, big galleta, wolfberry, Indian ricegrass

Typical profile:

Surface rock fragments: About 3 percent cobbles, 70 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 16 inches; very gravelly sandy loam
 Layer 3--16 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 10 to 20 inches
 Permeability class (root zone): Moderately rapid
 Salinity: Saline within 40 inches
 Available water capacity: About 1.0 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB005NV--Limy 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Arizo and similar soils**

Composition: 0 to 5 percent
 Slope: 2 to 4 percent
 Landform: Drainageways
 Typical vegetation: White bursage, hollyleaf bursage, desertwillow, big galleta, white burrobrush, creosotebush
 Ecological site: 030XB028NV--Valley Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2050--Canoto-Naye association***Map Unit Setting***

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,400 to 4,000
 Precipitation: 4 to 6 inches
 Air temperature: 61 to 66 degrees Fahrenheit
 Frost-free period: 220 to 260 days

Composition

Canoto very gravelly sandy loam, 2 to 4 percent slopes--50 percent
 Naye very gravelly fine sandy loam, 2 to 4 percent slopes--35 percent
 Arizo very gravelly sandy loam, 2 to 4 percent slopes--10 percent
 Purob gravelly sandy loam, 4 to 8 percent slopes--5 percent

Component Description**Canoto and similar soils**

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Ephedra, Indian ricegrass, wolfberry, creosotebush, big galleta, shadscale, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 11 inches; very gravelly sandy loam
 Layer 2--11 to 60 inches; stratified gravelly loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 030XB005NV--Limy 5-7 P.Z.

Component Description**Naye and similar soils**

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Bladdersage, shadscale, dalea, white bursage, ephedra, big galleta, range ratany, creosotebush, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 7 inches; very gravelly fine sandy loam
 Layer 2--7 to 25 inches; very gravelly fine sandy loam
 Layer 3--25 to 39 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: High
 Depth to restrictive feature: Petrocalcic: 20 to 40 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB005NV--Limy 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Arizo and similar soils**

Composition: 0 to 10 percent
 Slope: 2 to 4 percent
 Landform: Drainageways
 Typical vegetation: White bursage, hollyleaf bursage, desertwillow, big galleta, white burrobrush, creosotebush
 Ecological site: 030XB028NV--Valley Wash

Purob and similar soils

Composition: 0 to 5 percent
 Slope: 4 to 8 percent
 Landform: Fan remnants
 Typical vegetation: Pale wolfberry, big galleta, Nevada ephedra, blackbrush, Indian ricegrass, bush muhly
 Ecological site: 030XB014NV--Shallow Gravelly Loam 7-9 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2051--Yermo-Woda-Nowoy association***Map Unit Setting***

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,400 to 2,500
 Precipitation: 3 to 6 inches
 Air temperature: 61 to 64 degrees Fahrenheit
 Frost-free period: 210 to 230 days

Composition

Yermo very gravelly sandy loam, 2 to 4 percent slopes--35 percent
 Woda sandy loam, 2 to 4 percent slopes--30 percent
 Nowoy gravelly loamy fine sand, 2 to 8 percent slopes--20 percent

Bluepoint loamy fine sand, 2 to 8 percent slopes--10 percent
 Casaga gravelly loam, 2 to 8 percent slopes--5 percent

Component Description

Yermo and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Desert needlegrass, Indian ricegrass, wolfberry, creosotebush, shadscale, white bursage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 6 inches; very gravelly sandy loam
 Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description

Woda and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rocks over lacustrine deposits
 Typical vegetation: Indian ricegrass, desertholly, seepweed, Fremont dalea, Sierra chinkapin

Typical profile:

Surface rock fragments: About 45 percent gravel
 Layer 1--0 to 1 inches; sandy loam
 Layer 2--1 to 10 inches; sandy loam
 Layer 3--10 to 18 inches; gravelly clay loam
 Layer 4--18 to 60 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 6 to 20 inches
 Permeability class (root zone): Moderately slow
 Salinity: Saline within 40 inches
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Component Description

Nowoy and similar soils

Landform: Alluvial flats
 Parent material: Alluvium derived from mixed rocks over lacustrine deposits
 Typical vegetation: Fremont dalea, desertholly, Indian ricegrass, seepweed

Typical profile:

Surface rock fragments: Less than 1 percent cobbles, about 45 percent gravel
 Layer 1--0 to 3 inches; gravelly loamy fine sand
 Layer 2--3 to 20 inches; very gravelly sandy loam
 Layer 3--20 to 60 inches; clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Medium
 Permeability class (root zone): Moderately slow
 Available water capacity: About 9 inches
 Present flooding: Rare
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Bluepoint and similar soils**

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Dunes

Typical vegetation: Creosotebush, white bursage, catclaw, fourwing saltbush, shadscale, screwbean mesquite, Indian ricegrass, honey mesquite

Ecological site: 030XY045NV--Shallow Gravelly Loam 8-10 P.Z.

Casaga and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Alluvial flats

Typical vegetation: Indian ricegrass, Fremont dalea, seablite, desertholly, shadscale

Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2052--Canoto very gravelly sandy loam, 2 to 4 percent slopes***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,400 to 4,200

Precipitation: 4 to 7 inches

Air temperature: 57 to 66 degrees Fahrenheit

Frost-free period: 200 to 240 days

Composition

Canoto very gravelly sandy loam, 2 to 4 percent slopes--85 percent

Weiser very gravelly sandy loam, 2 to 8 percent slopes--10 percent

Arizo very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description**Canoto and similar soils**

Landform: Alluvial fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Big galleta, creosotebush, wolfberry, Indian ricegrass, ephedra, shadscale, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 50 percent gravel

Layer 1--0 to 11 inches; very gravelly sandy loam

Layer 2--11 to 60 inches; stratified gravelly loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Weiser and similar soils**

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Range ratany, creosotebush, white bursage

Ecological site: 030XB019NV--Limy 3-5 P.Z.

Arizo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Creosotebush, white burrobrush, big galleta, white bursage, hollyleaf bursage, desertwillow

Ecological site: 030XB028NV--Valley Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2053--Yermo-Greyeagle-Arizo association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,600 to 4,000

Precipitation: 4 to 10 inches

Air temperature: 57 to 66 degrees Fahrenheit

Frost-free period: 210 to 260 days

Composition

Yermo very gravelly sandy loam, 15 to 30 percent slopes--60 percent

Greyeagle very gravelly sandy loam, 8 to 15 percent slopes--20 percent

Arizo very stony sandy loam, 4 to 15 percent slopes--15 percent

Scottcas very gravelly sandy loam, 2 to 8 percent slopes--5 percent

Component Description**Yermo and similar soils**

Landform: Alluvial fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, creosotebush, Indian ricegrass, desert needlegrass, range ratany

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent

Runoff: Medium

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description**Greyeagle and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, desert needlegrass, Indian ricegrass, creosotebush, Nevada ephedra, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 60 percent gravel, 2 percent cobbles

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 6 inches; gravelly sandy loam

Layer 3--6 to 8 inches; very gravelly sandy loam

Layer 4--8 to 24 inches; indurated

Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.6 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Component Description**Arizo and similar soils**

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Creosotebush, white bursage, white burrobush, range ratany, shadscale, Indian ricegrass, bladdersage, desert needlegrass

Typical profile:

Surface rock fragments: About 18 percent stones, 15 percent cobbles, 25 percent gravel

Layer 1--0 to 8 inches; very stony sandy loam

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: Rare

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Scottcas and similar soils**

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Range ratany, desert needlegrass, Indian ricegrass, creosotebush, white bursage

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2054--Yermo, hot-Yermo-Arizo association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,000 to 4,000

Precipitation: 4 to 6 inches

Air temperature: 57 to 66 degrees Fahrenheit

Frost-free period: 210 to 250 days

Composition

Yermo very gravelly sandy loam, 2 to 4 percent slopes--40 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--30 percent

Arizo very gravelly sandy loam, 2 to 4 percent slopes--15 percent

Yurm very gravelly sandy loam, 2 to 4 percent slopes--7 percent

Pinez very gravelly loamy sand, 4 to 8 percent slopes--3 percent

Ashmed gravelly fine sandy loam, 2 to 4 percent slopes--3 percent

Casaga gravelly loam, 0 to 2 percent slopes--2 percent

Component Description**Yermo hot and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Creosotebush, shadscale, white bursage, wolfberry, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description**Yermo and similar soils**

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, range ratany, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description

Arizo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Cattle saltbush, white burrobrush, creosotebush, Indian ricegrass, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel

Layer 1--0 to 8 inches; very gravelly sandy loam

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: Rare

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yurm and similar soils

Composition: 0 to 7 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, desert needlegrass, creosotebush, white bursage, shadscale, wolfberry

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Pinez and similar soils

Composition: 0 to 3 percent

Slope: 4 to 8 percent

Landform: Fan skirts

Typical vegetation: Creosotebush, white bursage, Indian ricegrass, desert needlegrass, shadscale, wolfberry

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Ashmed and similar soils

Composition: 0 to 3 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, desert needlegrass, white bursage, range ratany, creosotebush

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Casaga and similar soils

Composition: 0 to 2 percent

Slope: 0 to 2 percent

Landform: Fan skirts

Typical vegetation: Creosotebush, desert alysum, white burrobrush, white bursage, desert needlegrass, Indian ricegrass

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2055--Canoto association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,600 to 4,400

Precipitation: 5 to 7 inches

Air temperature: 57 to 66 degrees Fahrenheit

Frost-free period: 200 to 240 days

Composition

Canoto very gravelly sandy loam, 2 to 8 percent slopes--60 percent

Canoto very gravelly sandy loam, 2 to 4 percent slopes--25 percent

Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--5 percent

Arizo very gravelly sandy loam, 2 to 8 percent slopes--4 percent

Yurm very gravelly sandy loam, 2 to 8 percent slopes--3 percent

Irongold extremely gravelly loam, 2 to 8 percent slopes--3 percent

Component Description

Canoto and similar soils

Landform: Fan skirts

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bush muhly, white bursage, spiny menodora, range ratany, big galleta, creosotebush, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 50 percent gravel

Layer 1--0 to 11 inches; very gravelly sandy loam

Layer 2--11 to 60 inches; stratified gravelly loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Component Description

Canoto moist and similar soils

Landform: Fan skirts

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Ephedra, big galleta, Indian ricegrass, wolfberry, creosotebush, shadscale, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 50 percent gravel

Layer 1--0 to 11 inches; very gravelly sandy loam

Layer 2--11 to 60 inches; stratified gravelly loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XB075NV--Gravelly Fan 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Niavi and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Stream terraces

Typical vegetation: Big galleta, white bursage, Mojave buckwheat, ephedra, creosotebush, range ratany,

Anderson's wolfberry, Virgin River encelia

Ecological site: 030XB134NV--Quartzite Outwash

Arizo and similar soils

Composition: 0 to 4 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Creosotebush, white burrobrush, big galleta, desertwillow, hollyleaf bursage, white bursage

Ecological site: 030XB028NV--Valley Wash

Yurm and similar soils

Composition: 0 to 3 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Creosotebush, shadscale, Indian ricegrass

Ecological site: 030XA047NV--Barren Fan 3-8 P.Z.

Irongold and similar soils

Composition: 0 to 3 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Blackbrush, Nevada ephedra, big galleta, creosotebush, bush muhly, desert needlegrass

Ecological site: 030XB029NV--Shallow Gravelly Loam 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2057--Yermo-Commski association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,300 to 3,700

Precipitation: 3 to 6 inches

Air temperature: 62 to 67 degrees Fahrenheit

Frost-free period: 210 to 230 days

Composition

Yermo very gravelly sandy loam, 0 to 4 percent slopes--50 percent

Commski very gravelly fine sandy loam, 0 to 2 percent slopes--40 percent

Greyeagle very gravelly sandy loam, 0 to 4 percent slopes--5 percent

Arizo very gravelly loamy sand, 2 to 4 percent slopes--5 percent

Component Description

Yermo and similar soils

Landform: Fan skirts

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, wolfberry, Indian ricegrass, white bursage, shadscale, creosotebush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description

Commski and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White bursage, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam

Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Low

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Greyeagle and similar soils

Composition: 0 to 5 percent

Slope: 0 to 4 percent

Landform: Fan remnants

Typical vegetation: Creosotebush, desert alysum, white burrobrush, desert needlegrass, Indian ricegrass, white bursage

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Arizo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: Cattle saltbush, white burrobrush, creosotebush, Indian ricegrass, white bursage

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2058--Canoto-Nickel association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,400 to 4,000

Precipitation: 4 to 7 inches

Air temperature: 57 to 66 degrees Fahrenheit

Frost-free period: 200 to 240 days

Composition

Canoto very gravelly sandy loam, 2 to 4 percent slopes--50 percent

Nickel gravelly loam, 2 to 15 percent slopes--40 percent

Pinez very gravelly loamy sand, 2 to 15 percent slopes--5 percent

Commski very gravelly fine sandy loam, 2 to 15 percent slopes--5 percent

Component Description

Canoto and similar soils

Landform: Fan skirts

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Wolfberry, white bursage, big galleta, creosotebush, shadscale, ephedra, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, 2 percent cobbles, about 50 percent gravel

Layer 1--0 to 11 inches; very gravelly sandy loam

Layer 2--11 to 60 inches; stratified gravelly loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Component Description

Nickel and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, creosotebush, yucca, white bursage, ephedra, big galleta

Typical profile:

Surface rock fragments: About 1 percent cobbles, 50 percent gravel

Layer 1--0 to 7 inches; gravelly loam

Layer 2--7 to 19 inches; extremely gravelly sandy loam

Layer 3--19 to 60 inches; extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent

Runoff: High

Permeability class (root zone): Moderately slow
 Available water capacity: About 3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c
 Ecological site: 030XB005NV--Limy 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Pinez and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 15 percent
 Landform: Fan remnants
 Typical vegetation: Desertholly, seepweed, Indian ricegrass, Fremont dalea, Sierra chinkapin
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Commski and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 15 percent
 Landform: Fan remnants
 Typical vegetation: Dalea, wolfberry, seepweed, desertholly, shadscale
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2060--Purob-Irongold association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 4,000 to 5,500
 Precipitation: 5 to 10 inches
 Air temperature: 53 to 63 degrees Fahrenheit
 Frost-free period: 160 to 200 days

Composition

Purob gravelly sandy loam, 2 to 8 percent slopes--60 percent
 Irongold extremely gravelly loam, 2 to 8 percent slopes--25 percent

Arizo very gravelly sandy loam, 2 to 8 percent slopes--10 percent
 Commski Family very gravelly fine sandy loam, 2 to 8 percent slopes--5 percent

Component Description

Purob and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Blackbrush, Indian ricegrass, bush muhly, pale wolfberry, big galleta, Nevada ephedra

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; gravelly sandy loam
 Layer 2--3 to 10 inches; very gravelly loam
 Layer 3--10 to 19 inches; very gravelly loam
 Layer 4--19 to 60 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 14 to 20 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB014NV--Shallow Gravelly Loam 7-9 P.Z.

Component Description

Irongold and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Blackbrush, desert needlegrass, bush muhly, creosotebush, big galleta, Nevada ephedra

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 65 percent gravel
 Layer 1--0 to 1 inches; extremely gravelly loam
 Layer 2--1 to 7 inches; gravelly loam

Layer 3--7 to 11 inches; gravelly loam
 Layer 4--11 to 34 inches; cemented
 Layer 5--34 to 60 inches; extremely gravelly loamy
 coarse sand

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 10 to 14
 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 1.3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB029NV--Shallow Gravelly Loam
 5-7 P.Z.

Typical soil descriptions including ranges in
 characteristics are in the "Classification of the Soils"
 section.

Contrasting Inclusions

Arizo and similar soils

Composition: 0 to 10 percent
 Slope: 2 to 8 percent
 Landform: Drainageways
 Typical vegetation: Creosotebush, white burrobrush,
 big galleta, desertwillow, hollyleaf bursage, white
 bursage
 Ecological site: 030XB028NV--Valley Wash

Commski Family and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 8 percent
 Landform: Fan aprons
 Typical vegetation: Desert needlegrass, ephedra,
 white bursage, blackbrush, shadscale
 Ecological site: 030XA006NV--Shallow Limestone
 Slope 5-7 P.Z.

Management

For information about managing this map unit, see
 the following sections and associated tables in Part II
 of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2061--Vace gravelly sandy loam, 4 to 30 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,000 to 4,800
 Precipitation: 4 to 7 inches
 Air temperature: 63 to 66 degrees Fahrenheit
 Frost-free period: 200 to 250 days

Composition

Vace gravelly sandy loam, 4 to 30 percent slopes--95
 percent
 Arizo very gravelly sandy loam, 2 to 4 percent slopes--
 5 percent

Component Description

Vace and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock
 sources
 Typical vegetation: Indian ricegrass, shadscale,
 Nevada ephedra, white bursage, big galleta,
 creosotebush

Typical profile:

Surface rock fragments: About 1 percent cobbles, 50
 percent gravel
 Layer 1--0 to 12 inches; gravelly sandy loam
 Layer 2--12 to 30 inches; indurated
 Layer 3--30 to 60 inches; very gravelly loamy sand

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 4 to 30 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 4 to 20
 inches
 Permeability class (root zone): Moderate
 Sodidity: Sodic within 40 inches
 Available water capacity: About 1.2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB005NV--Limy 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Arizo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: White bursage, hollyleaf bursage, desertwillow, big galleta, creosotebush, white burrobrush

Ecological site: 030XB028NV--Valley Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2062--Purob-Niavi association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 4,200 to 4,700

Precipitation: 6 to 10 inches

Air temperature: 53 to 61 degrees Fahrenheit

Frost-free period: 160 to 220 days

Composition

Purob gravelly sandy loam, 15 to 50 percent slopes--75 percent

Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--10 percent

Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--8 percent

Zibate extremely gravelly sandy loam, 15 to 50 percent slopes--4 percent

Veet Family very gravelly sandy loam, 2 to 8 percent slopes--3 percent

Component Description

Purob and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Desert needlegrass, blackbrush, Nevada ephedra, desert bitterbrush

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 19 inches; stratified gravelly loam to very gravelly loam

Layer 3--19 to 26 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Petrocalcic: 10 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7e

Ecological site: 029XY077NV--Shallow Gravelly Loam 8-10 P.Z.

Component Description

Niavi and similar soils

Landform: Stream terraces

Parent material: Alluvium derived from quartzite

Typical vegetation: Range ratany, big galleta,

Anderson's wolfberry, Virgin River encelia,

creosotebush, ephedra, Mojave buckwheat, white bursage

Typical profile:

Surface rock fragments: About 1 percent stones, 35 percent cobbles, 40 percent gravel

Layer 1--0 to 2 inches; extremely cobbly fine sandy loam

Layer 2--2 to 8 inches; extremely gravelly coarse sandy loam

Layer 3--8 to 29 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam

Layer 4--29 to 60 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: Occasional
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB134NV--Quartzite Outwash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Niavi cool and similar soils

Composition: 0 to 8 percent
 Classification: Sandy-skeletal, mixed, mesic Typic Haplocalcids
 Slope: 2 to 8 percent
 Landform: Stream terraces
 Typical vegetation: Blackbrush, Utah juniper, Stansbury cliffrose, desert needlegrass, desert peachbrush
 Ecological site: 029XY143NV--Gravelly Inset Fan 8-10 P.Z.

Zibate and similar soils

Composition: 0 to 4 percent
 Slope: 15 to 50 percent, north to east aspects
 Landform: Mountains
 Typical vegetation: Blackbrush, big galleta, creosotebush, desert needlegrass, Nevada ephedra
 Ecological site: 030XB076NV--Shallow Gravelly Slope 5-7 P.Z.

Veet Family flooded and similar soils

Composition: 0 to 3 percent
 Classification: Loamy-skeletal, mixed, superactive, mesic Xeric Haplocambids
 Slope: 2 to 8 percent
 Landform: Drainageways
 Typical vegetation: Desert peachbrush, big sagebrush, Sandberg bluegrass, Indian ricegrass, skunkbush sumac, rubber rabbitbrush
 Ecological site: 029XY009NV--Upland Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Engineering" and "Soil Properties" sections

2064--Longjim-Purob-Niavi association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 3,800 to 4,700
 Precipitation: 6 to 10 inches
 Air temperature: 53 to 63 degrees Fahrenheit
 Frost-free period: 160 to 220 days

Composition

Longjim extremely gravelly fine sandy loam, 4 to 15 percent slopes--55 percent
 Purob gravelly sandy loam, 4 to 15 percent slopes--20 percent
 Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--10 percent
 Canoto very gravelly sandy loam, 2 to 8 percent slopes--5 percent
 Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--5 percent
 Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--3 percent
 Dedas Family very gravelly sandy loam, 4 to 30 percent slopes--2 percent

Component Description

Longjim and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Big galleta, desert needlegrass, Anderson wolfberry, creosotebush, blackbrush, white bursage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 3 inches; extremely gravelly fine sandy loam
 Layer 2--3 to 8 inches; gravelly loam
 Layer 3--8 to 16 inches; very gravelly sandy loam
 Layer 4--16 to 20 inches; indurated
 Layer 5--20 to 45 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 14 to 20 inches

Permeability class (root zone): Moderate
 Available water capacity: About 1.2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB076NV--Shallow Gravelly Slope
 5-7 P.Z.

Component Description

Purob and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Blackbrush, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; gravelly sandy loam
 Layer 2--3 to 19 inches; stratified gravelly loam to very gravelly loam
 Layer 3--19 to 26 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 10 to 20 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7e
 Ecological site: 029XY077NV--Shallow Gravelly Loam
 8-10 P.Z.

Component Description

Niavi and similar soils

Landform: Stream terraces
 Parent material: Alluvium derived from quartzite
 Typical vegetation: Big galleta, creosotebush, range ratany, white bursage, Mojave buckwheat, ephedra, Virgin River encelia, Anderson's wolfberry

Typical profile:

Surface rock fragments: About 1 percent stones, 35 percent cobbles, 40 percent gravel
 Layer 1--0 to 2 inches; extremely cobbly fine sandy loam
 Layer 2--2 to 8 inches; extremely gravelly coarse sandy loam
 Layer 3--8 to 29 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam
 Layer 4--29 to 60 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 2 inches
 Present flooding: Occasional
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB134NV--Quartzite Outwash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Canoto and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 8 percent
 Landform: Fan skirts
 Typical vegetation: Indian ricegrass, white bursage, shadscale, ephedra, big galleta, creosotebush, wolfberry
 Ecological site: 030XB005NV--Limy 5-7 P.Z.

Niavi rarely flooded and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 8 percent
 Landform: Stream terraces
 Typical vegetation: Desert needlegrass, big galleta, blackbrush, winterfat, Shockley's goldenhead
 Ecological site: 030XB108NV--Gravelly Inset Fan 7-9 P.Z.

Niavi cool and similar soils

Composition: 0 to 3 percent

Classification: Sandy-skeletal, mixed, mesic Typic Haplocalcids
 Slope: 2 to 8 percent
 Landform: Stream terraces
 Typical vegetation: Desert peachbrush, Utah juniper, desert needlegrass, blackbrush, Stansbury cliffrose
 Ecological site: 029XY143NV--Gravelly Inset Fan 8-10 P.Z.

Dedas Family and similar soils

Composition: 0 to 2 percent
 Classification: Loamy-skeletal, mixed, superactive, thermic, shallow Typic Argidurids
 Slope: 4 to 30 percent
 Landform: Rock pediments
 Typical vegetation: Anderson wolfberry, desert needlegrass, big galleta, white bursage, creosotebush, blackbrush
 Ecological site: 030XB076NV--Shallow Gravelly Slope 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2070--Shamock gravelly fine sandy loam, 2 to 4 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Bolson
 Elevation: 2,400 to 2,700
 Precipitation: 3 to 5 inches
 Air temperature: 61 to 64 degrees Fahrenheit
 Frost-free period: 200 to 220 days

Composition

Shamock gravelly fine sandy loam, 2 to 4 percent slopes--90 percent
 Wanomie sandy loam, 0 to 2 percent slopes--5 percent
 Arizo very gravelly loamy sand, 2 to 4 percent slopes--3 percent
 Corbilt gravelly fine sandy loam, 2 to 4 percent slopes--2 percent

Component Description

Shamock and similar soils

Landform: Alluvial flats

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert alysum, creosotebush, white bursage, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent cobbles, about 60 percent gravel
 Layer 1--0 to 4 inches; gravelly fine sandy loam
 Layer 2--4 to 37 inches; gravelly fine sandy loam
 Layer 3--37 to 58 inches; cemented
 Layer 4--58 to 60 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 25 to 40 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4e
 Nonirrigated land capability: 7s
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Wanomie and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 2 percent
 Landform: Fan remnants
 Typical vegetation: Creosotebush, Indian ricegrass, white bursage, desert alysum
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Arizo and similar soils

Composition: 0 to 3 percent
 Slope: 2 to 4 percent
 Landform: Drainageways
 Typical vegetation: Indian ricegrass, creosotebush, white bursage, cattle saltbush, white burrobrush
 Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Corbilt and similar soils

Composition: 0 to 2 percent

Slope: 2 to 4 percent
 Landform: Alluvial flats
 Typical vegetation: White bursage, desert
 needlegrass, creosotebush, Indian ricegrass
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see
 the following sections and associated tables in Part II
 of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2071--Shamock-Skelon association

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,400 to 2,700
 Precipitation: 3 to 8 inches
 Air temperature: 61 to 65 degrees Fahrenheit
 Frost-free period: 200 to 220 days

Composition

Shamock gravelly fine sandy loam, 0 to 4 percent
 slopes--45 percent
 Skelon very gravelly sandy loam, 0 to 4 percent
 slopes--40 percent
 Nowoy gravelly sandy loam, 2 to 8 percent slopes--
 10 percent
 Corbilt gravelly fine sandy loam, 0 to 2 percent
 slopes--5 percent

Component Description

Shamock and similar soils

Landform: Alluvial flats
 Parent material: Alluvium derived from mixed rock
 sources
 Typical vegetation: Indian ricegrass, desert alysum,
 white bursage, creosotebush

Typical profile:

Surface rock fragments: Less than 1 percent cobbles,
 about 60 percent gravel
 Layer 1--0 to 4 inches; gravelly fine sandy loam
 Layer 2--4 to 37 inches; gravelly fine sandy loam
 Layer 3--37 to 58 inches; cemented
 Layer 4--58 to 60 inches; indurated

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 25 to 40 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description

Skelon and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock
 sources
 Typical vegetation: White bursage, white burrobrush,
 creosotebush, desert alysum, desert needlegrass,
 Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones,
 about 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 4 inches; very gravelly sandy loam
 Layer 2--4 to 28 inches; stratified very gravelly fine
 sandy loam to very gravelly coarse sandy loam
 Layer 3--28 to 44 inches; indurated
 Layer 4--44 to 52 inches; very gravelly sandy loam
 Layer 5--52 to 60 inches; extremely gravelly coarse
 sand

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 20 to 40 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Typical soil descriptions including ranges in
 characteristics are in the "Classification of the Soils"
 section.

Contrasting Inclusions**Nowoy and similar soils**

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Alluvial flats

Typical vegetation: Desert alysum, white bursage, creosotebush, Indian ricegrass

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Corbilt and similar soils

Composition: 0 to 5 percent

Slope: 0 to 2 percent

Landform: Fan skirts

Typical vegetation: Indian ricegrass, desert needlegrass, white bursage, creosotebush

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2080--St. Thomas-Rock outcrop-Commski association***Map Unit Setting***

MLRA: 30

Landscape: Hills

Elevation: 3,000 to 3,300

Precipitation: 3 to 7 inches

Air temperature: 64 to 70 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

St. Thomas very stony fine sandy loam, 8 to 30 percent slopes--35 percent

Rock outcrop--30 percent

Commski very gravelly fine sandy loam, 8 to 15 percent slopes--20 percent

Arizo very gravelly loamy sand, 2 to 4 percent slopes--9 percent

Weiser very gravelly sandy loam, 2 to 15 percent slopes--6 percent

Component Description**St. Thomas and similar soils**

Landform: Hills

Parent material: Colluvium derived from limestone over residuum weathered from limestone

Typical vegetation: Shadscale, creosotebush, Indian ricegrass, white bursage

Typical profile:

Layer 1--0 to 3 inches; very stony fine sandy loam

Layer 2--3 to 12 inches; extremely gravelly loam

Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 30 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA056NV--Loamy Hill 3-5 P.Z.

Component Description**Rock outcrop**

Landform: Hills

Component Properties and Qualities

Slope: 8 to 30

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Component Description**Commski and similar soils**

Landform: Hills

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Indian ricegrass, shadscale, creosotebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam
Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Medium

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Arizo and similar soils**

Composition: 0 to 9 percent

Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: Cattle saltbush, Indian ricegrass, creosotebush, white burrobush, white bursage

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Weiser and similar soils

Composition: 0 to 6 percent

Slope: 2 to 15 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, creosotebush, shadscale

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2081--St. Thomas-Tecopa-Rock outcrop complex, 15 to 75 percent slopes***Map Unit Setting***

MLRA: 30

Landscape: Hills

Elevation: 3,500 to 4,500

Precipitation: 4 to 8 inches

Air temperature: 59 to 63 degrees Fahrenheit

Frost-free period: 200 to 240 days

Composition

St. Thomas very stony fine sandy loam, 30 to 75 percent slopes--45 percent

Tecopa extremely gravelly sandy loam, 15 to 75 percent slopes--25 percent

Rock outcrop--15 percent

Zibate very gravelly sandy loam, 15 to 50 percent slopes--10 percent

Xeric Haplocalcids very gravelly sandy loam, 15 to 75 percent slopes--5 percent

Component Description**St. Thomas and similar soils**

Landform: Hills

Parent material: Colluvium derived from limestone over residuum weathered from limestone

Typical vegetation: Creosotebush, Indian ricegrass, white bursage, shadscale

Typical profile:

Layer 1--0 to 3 inches; very stony fine sandy loam

Layer 2--3 to 12 inches; extremely gravelly loam

Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA056NV--Loamy Hill 3-5 P.Z.

Component Description**Tecopa and similar soils**

Landform: Hills

Parent material: Colluvium derived from mixed rocks over residuum weathered from mixed rocks

Typical vegetation: Other perennial forbs, other perennial grasses, desert needlegrass, Indian ricegrass, other annual forbs, other annual grasses, white bursage, shadscale, Nevada ephedra, creosotebush

Typical profile:

Surface rock fragments: About 3 percent stones, 10 percent cobbles, 55 percent gravel
 Layer 1--0 to 1 inches; extremely gravelly sandy loam
 Layer 2--1 to 7 inches; very gravelly sandy loam
 Layer 3--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 75 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 2 to 10 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA054NV--Limy Hill 5-8 P.Z.

Component Description**Rock outcrop**

Landform: Hills

Component Properties and Qualities

Slope: 15 to 75

Interpretive Groups

Nonirrigated land capability: Not determined
 Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Zibate and similar soils**

Composition: 0 to 10 percent
 Slope: 15 to 50 percent
 Landform: Hills
 Typical vegetation: Blackbrush, Indian ricegrass, desert needlegrass
 Ecological site: 030XA095NV--Shallow Gravelly Slope 8-12 P.Z.

Xeric Haplocalcids and similar soils

Composition: 0 to 5 percent
 Classification: Loamy-skeletal, mixed, superactive, mesic Xeric Haplocalcids

Slope: 15 to 75 percent

Landform: Hills

Typical vegetation: Needleandthread, ephedra, Indian ricegrass, desert needlegrass, Wyoming big sagebrush
 Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2090--Breko-Veet association***Map Unit Setting***

MLRA: 29

Landscape: Fan piedmont

Elevation: 5,000 to 6,000

Precipitation: 8 to 10 inches

Air temperature: 50 to 57 degrees Fahrenheit

Frost-free period: 130 to 150 days

Composition

Breko gravelly sandy loam, 2 to 4 percent slopes--55 percent

Veet very gravelly sandy loam, 2 to 4 percent slopes--35 percent

Xeric Torriorthents very gravelly sand, 4 to 15 percent slopes--5 percent

Wardenot very gravelly loamy sand, 4 to 8 percent slopes--2 percent

Durinodic Xeric Haplargids gravelly sandy loam, 8 to 30 percent slopes--2 percent

Xeric Argidurids gravelly sandy loam, 2 to 8 percent slopes--1 percent

Component Description**Breko and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny hopsage, desert needlegrass, Indian ricegrass, galleta, Nevada ephedra, fourwing saltbush, Wyoming big sagebrush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 10 percent cobbles, 50 percent gravel
 Layer 1--0 to 6 inches; gravelly sandy loam
 Layer 2--6 to 21 inches; very gravelly sandy clay loam

Layer 3--21 to 29 inches; extremely gravelly sandy clay loam

Layer 4--29 to 60 inches; stratified gravelly sandy loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY006NV--Loamy 8-10 P.Z.

Component Description

Veet and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny hopsage, bud sagebrush, Indian ricegrass, desert needlegrass, fourwing saltbush, galleta, winterfat, Wyoming big sagebrush

Typical profile:

Surface rock fragments: About 1 percent cobbles, 50 percent gravel

Layer 1--0 to 5 inches; very gravelly sandy loam

Layer 2--5 to 20 inches; very gravelly sandy loam

Layer 3--20 to 60 inches; stratified extremely gravelly sandy loam to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: Rare

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY049NV--Sandy Loam 8-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Xeric Torriorthents and similar soils

Composition: 0 to 5 percent

Classification: Sandy-skeletal, mixed, mesic Xeric Torriorthents

Slope: 4 to 15 percent

Landform: Drainageways

Typical vegetation: Rubber rabbitbrush, big sagebrush, Sandberg bluegrass, Indian ricegrass, desert peach, turbinella oak, rose, skunkbush sumac
Ecological site: 029XY009NV--Upland Wash

Wardenot and similar soils

Composition: 0 to 2 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: Bottlebrush squirreltail, fourwing saltbush, desert needlegrass, bud sagebrush, shadscale, winterfat, galleta, Indian ricegrass, black greasewood
Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Durinodic Xeric Haplargids and similar soils

Composition: 0 to 2 percent

Classification: Loamy-skeletal, mixed, superactive, mesic Durinodic Xeric Haplargids

Slope: 8 to 30 percent

Landform: Backslopes of fan remnants

Typical vegetation: Galleta, spiny hopsage, Wyoming big sagebrush, fourwing saltbush, Nevada ephedra, Indian ricegrass, desert needlegrass

Ecological site: 029XY049NV--Sandy Loam 8-12 P.Z.

Xeric Argidurids and similar soils

Composition: 0 to 1 percent

Classification: Loamy-skeletal, mixed, superactive, mesic, shallow Xeric Argidurids

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Bluegrass, galleta, winterfat, needlegrass, Nevada ephedra, Indian ricegrass, black sagebrush

Ecological site: 029XY014NV--Shallow Calcareous Slope 8-12 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2110--Pahrump fine sandy loam, 4 to 15 percent slopes

Map Unit Setting

MLRA: 30
Landscape: Bolson
Elevation: 2,700 to 2,800
Precipitation: 3 to 5 inches
Air temperature: 62 to 65 degrees Fahrenheit
Frost-free period: 180 to 240 days

Composition

Pahrump fine sandy loam, 4 to 15 percent slopes--90 percent
Typic Torriorthents very gravelly sandy loam, 2 to 8 percent slopes--10 percent

Component Description

Pahrump and similar soils

Landform: Lake terraces
Parent material: Lacustrine deposits
Typical vegetation: Bladdersage, white bursage, shadscale, ephedra, big galleta, Indian ricegrass, honey mesquite

Typical profile:

Surface rock fragments: About 30 percent gravel
Layer 1--0 to 2 inches; fine sandy loam
Layer 2--2 to 16 inches; stratified very fine sandy loam to loam
Layer 3--16 to 42 inches; stratified very gravelly silt loam to very gravelly silty clay loam
Layer 4--42 to 60 inches; very fine sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
Runoff: High
Permeability class (root zone): Moderately slow
Available water capacity: About 8 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4e
Nonirrigated land capability: 7c
Ecological site: 030XY049NV--Breaks 3-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Typic Torriorthents and similar soils

Composition: 0 to 10 percent
Classification: Loamy-skeletal, mixed, superactive, calcareous, thermic Typic Torriorthents
Slope: 2 to 8 percent
Landform: Lake plains
Typical vegetation: White bursage, Indian ricegrass, wolfberry, creosotebush, big galleta, ephedra, shadscale
Ecological site: 030XB005NV--Limy 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Crops and Pasture" section
"Engineering" and "Soil Properties" sections

2121--Commski-Arizo association

Map Unit Setting

MLRA: 30
Landscape: Fan piedmont
Elevation: 2,500 to 3,500
Precipitation: 3 to 6 inches
Air temperature: 65 to 70 degrees Fahrenheit
Frost-free period: 210 to 260 days

Composition

Commski very gravelly fine sandy loam, 0 to 4 percent slopes--60 percent
Arizo very gravelly loamy sand, 0 to 4 percent slopes--30 percent
Destazo gravelly clay loam, 0 to 4 percent slopes--10 percent

Component Description

Commski and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from limestone and dolomite
Typical vegetation: Desert needlegrass, Indian ricegrass, white bursage, range ratany, creosotebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam
 Layer 2--5 to 14 inches; extremely gravelly sandy loam
 Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: Low
 Permeability class (root zone): Moderate
 Available water capacity: About 3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description

Arizo and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Desert needlegrass, bladdersage, Indian ricegrass, creosotebush, white burrobrush, cattle saltbush, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel
 Layer 1--0 to 8 inches; very gravelly loamy sand
 Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: Negligible
 Permeability class (root zone): Rapid
 Available water capacity: About 3 inches
 Present flooding: Occasional
 Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w
 Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Destazo and similar soils

Composition: 0 to 10 percent
 Slope: 0 to 4 percent
 Landform: Summits of fan remnants
 Typical vegetation: Desert needlegrass, Indian ricegrass, white bursage, shadscale, range ratany, creosotebush
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2131--Upspring-Shorim-Rock outcrop association

Map Unit Setting

MLRA: 30
 Landscape: Hills
 Elevation: 3,500 to 4,000
 Precipitation: 3 to 6 inches
 Air temperature: 57 to 65 degrees Fahrenheit
 Frost-free period: 210 to 250 days

Composition

Upspring very gravelly sandy loam, 8 to 50 percent slopes--55 percent
 Shorim very gravelly sandy loam, 15 to 30 percent slopes--20 percent
 Rock outcrop--15 percent
 Yermo very gravelly sandy loam, 2 to 8 percent slopes--10 percent

Component Description

Upspring and similar soils

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Winterfat, creosotebush, spiny menodora, Indian ricegrass, desert needlegrass, shadscale, ephedra, white bursage

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam
 Layer 2--2 to 12 inches; very gravelly fine sandy loam
 Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 8 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14
 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.8 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA068NV--Calcareous Hill 5-8
 P.Z.

Component Description

Shorim and similar soils

Landform: Hills
 Parent material: Residuum weathered from volcanic
 rocks
 Typical vegetation: Anderson wolfberry, desert
 needlegrass, bud sagebrush, shadscale, Nevada
 ephedra, creosotebush

Typical profile:

Surface rock fragments: About 1 percent stones, 10
 percent cobbles, 70 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 10 inches; gravelly sandy loam
 Layer 3--10 to 21 inches; very gravelly sandy loam
 Layer 4--21 to 24 inches; indurated
 Layer 5--24 to 30 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 15 to 30 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 20 to 38 inches
 Bedrock (lithic): 21 to 40 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 1.3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description

Rock outcrop

Landform: Hills

Component Properties and Qualities

Slope: 8 to 50

Interpretive Groups

Nonirrigated land capability: Not determined
 Ecological site: None assigned

Typical soil descriptions including ranges in
 characteristics are in the "Classification of the Soils"
 section.

Contrasting Inclusions

Yermo and similar soils

Composition: 0 to 10 percent
 Slope: 2 to 8 percent
 Landform: Drainageways
 Typical vegetation: Anderson wolfberry,
 creosotebush, Nevada ephedra, shadscale, bud
 sagebrush, desert needlegrass
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see
 the following sections and associated tables in Part II
 of this publication:
 "Range" section
 "Engineering" and "Soil Properties" sections

2140--Jonnic-Niavi association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 3,000 to 4,200
 Precipitation: 6 to 9 inches
 Air temperature: 57 to 64 degrees Fahrenheit
 Frost-free period: 180 to 220 days

Composition

Jonnic gravelly loam, 4 to 8 percent slopes--75
 percent
 Niavi extremely cobbly fine sandy loam, 2 to 8
 percent slopes--10 percent
 Lealandic very gravelly sandy loam, 4 to 8 percent
 slopes--6 percent

Arizo very gravelly sandy loam, 2 to 8 percent slopes--4 percent

Lastchance extremely gravelly loam, 2 to 8 percent slopes--4 percent

Canoto very gravelly sandy loam, 4 to 8 percent slopes--1 percent

Component Description

Jonnic and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, Mojave buckwheat, ephedra, blackbrush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 3 percent cobbles, 55 percent gravel

Layer 1--0 to 2 inches; gravelly loam

Layer 2--2 to 21 inches; very gravelly clay

Layer 3--21 to 38 inches; extremely cobbly sandy clay loam

Layer 4--38 to 42 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 25 to 40 inches

Permeability class (root zone): Slow

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA093NV--Quartzite Fan 5-7 P.Z.

Component Description

Niavi and similar soils

Landform: Stream terraces

Parent material: Alluvium derived from quartzite

Typical vegetation: Big galleta, white bursage, Mojave buckwheat, ephedra, creosotebush, Virgin River encelia, Anderson's wolfberry, range ratany

Typical profile:

Surface rock fragments: About 1 percent stones, 35 percent cobbles, 40 percent gravel

Layer 1--0 to 2 inches; extremely cobbly fine sandy loam

Layer 2--2 to 8 inches; extremely gravelly coarse sandy loam

Layer 3--8 to 29 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam

Layer 4--29 to 60 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: Occasional

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB134NV--Quartzite Outwash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Lealandic and similar soils

Composition: 0 to 6 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: Spiny menodora, creosotebush, range ratany, white bursage

Ecological site: 030XA071NV--Cobbly Claypan 5-7 P.Z.

Arizo and similar soils

Composition: 0 to 4 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Creosotebush, white burrobrush, white bursage, hollyleaf bursage, desertwillow, big galleta

Ecological site: 030XB028NV--Valley Wash

Lastchance and similar soils

Composition: 0 to 4 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Desert needlegrass, creosotebush, Indian ricegrass, white bursage, range ratany, winterfat

Ecological site: 030XA007NV--Gravelly Loam 5-7 P.Z.

Canoto and similar soils

Composition: 0 to 1 percent

Slope: 4 to 8 percent

Landform: Inset fans

Typical vegetation: Creosotebush, big galleta, ephedra, shadscale, white bursage, wolfberry, Indian ricegrass

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2151--Arizo-Bluepoint-Dune land complex, 0 to 4 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Bolson

Elevation: 2,500 to 3,500

Precipitation: 4 to 7 inches

Air temperature: 58 to 68 degrees Fahrenheit

Frost-free period: 200 to 260 days

Composition

Arizo very gravelly sandy loam, 0 to 2 percent slopes--40 percent

Bluepoint loamy fine sand, 0 to 2 percent slopes--35 percent

Dune land fine sand, 0 to 30 percent slopes--15 percent

Nopah loam, 0 to 2 percent slopes--5 percent

Shamock gravelly fine sandy loam, 0 to 4 percent slopes--5 percent

Component Description

Arizo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, white bursage, cattle saltbush, white burrobrush, creosotebush, Indian ricegrass, bladdersage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel

Layer 1--0 to 8 inches; very gravelly sandy loam

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Component Description

Bluepoint and similar soils

Landform: Sand sheets

Parent material: Eolian sands

Typical vegetation: Desert needlegrass, white bursage, fourwing saltbush, winterfat, creosotebush, Indian ricegrass, sand dropseed

Typical profile:

Layer 1--0 to 9 inches; loamy fine sand

Layer 2--9 to 17 inches; stratified fine sand to gravelly loamy fine sand

Layer 3--17 to 41 inches; fine sand

Layer 4--41 to 60 inches; stratified sand to very fine sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Negligible

Permeability class (root zone): Moderately rapid

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA069NV--Limy Sand 5-8 P.Z.

Component Description**Dune land**

Landform: Dunes

Component Properties and Qualities

Slope: 0 to 30 percent

Runoff: Very low

Interpretive Groups

Nonirrigated land capability: 8e

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Nopah and similar soils**

Composition: 0 to 5 percent

Slope: 0 to 2 percent

Landform: Alluvial flats

Typical vegetation: Other shrubs, seepweed, Indian ricegrass, white bursage, shadscale, cattle saltbush, white burrobrush, creosotebush

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Shamock and similar soils

Composition: 0 to 5 percent

Slope: 0 to 4 percent

Landform: Alluvial flats

Typical vegetation: Indian ricegrass, desert alysum, creosotebush, white bursage

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2152--Arizo very gravelly sandy loam, moist, 0 to 2 percent slopes***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,500 to 4,000

Precipitation: 4 to 7 inches

Air temperature: 57 to 66 degrees Fahrenheit

Frost-free period: 200 to 260 days

Composition

Arizo very gravelly sandy loam, 0 to 2 percent slopes--85 percent

Corbilt gravelly fine sandy loam, 0 to 4 percent slopes--5 percent

Bluepoint loamy fine sand, 0 to 4 percent slopes--5 percent

Arizo very gravelly loamy sand, 2 to 4 percent slopes--5 percent

Component Description**Arizo and similar soils**

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, desert needlegrass, bladdersage, white bursage, cattle saltbush, white burrobrush, creosotebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel

Layer 1--0 to 8 inches; very gravelly sandy loam

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Corbilt and similar soils**

Composition: 0 to 5 percent

Slope: 0 to 4 percent

Landform: Alluvial fans

Typical vegetation: Creosotebush, cattle saltbush, white bursage, Indian ricegrass

Ecological site: 030XY046NV--Outwash Plain

Bluepoint and similar soils

Composition: 0 to 5 percent

Slope: 0 to 4 percent

Landform: Sand sheets

Typical vegetation: White bursage, fourwing saltbush, winterfat, creosotebush, Indian ricegrass, desert needlegrass, sand dropseed

Ecological site: 030XA069NV--Limy Sand 5-8 P.Z.

Arizo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Desert needlegrass, white bursage, cattle saltbush, white burrobrush, creosotebush, Indian ricegrass, bladdersage

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2153--Arizo-Corbilt-Commski association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,400 to 2,800

Precipitation: 3 to 7 inches

Air temperature: 61 to 70 degrees Fahrenheit

Frost-free period: 200 to 240 days

Composition

Arizo very gravelly sandy loam, 0 to 2 percent slopes--35 percent

Corbilt very gravelly sandy loam, 0 to 2 percent slopes--25 percent

Commski very gravelly fine sandy loam, 0 to 2 percent slopes--25 percent

Bluepoint loamy fine sand, 0 to 4 percent slopes--9 percent

Migern gravelly sandy loam, 2 to 4 percent slopes--4 percent

Greyeagle very gravelly sandy loam, 2 to 8 percent slopes--1 percent

Tecopa extremely gravelly sandy loam, 8 to 15 percent slopes--1 percent

Component Description

Arizo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White burrobrush, creosotebush, Indian ricegrass, bladdersage, desert needlegrass, cattle saltbush, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel

Layer 1--0 to 8 inches; very gravelly sandy loam

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Component Description

Corbilt and similar soils

Landform: Fan skirts

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, Indian ricegrass, white bursage, shadscale, white burrobrush, wolfberry

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 32 inches; gravelly fine sandy loam

Layer 3--32 to 56 inches; very gravelly sandy loam

Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Very low

Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Component Description**Commski and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Desert needlegrass, Indian ricegrass, creosotebush, range ratany, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam

Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Low

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Bluepoint and similar soils**

Composition: 0 to 9 percent

Slope: 0 to 4 percent

Landform: Sand sheets

Typical vegetation: Fourwing saltbush, desert needlegrass, white bursage, sand dropseed, winterfat, creosotebush, Indian ricegrass

Ecological site: 030XA069NV--Limy Sand 5-8 P.Z.

Migern and similar soils

Composition: 0 to 4 percent

Slope: 2 to 4 percent

Landform: Fan skirts

Typical vegetation: Shadscale, desert needlegrass, white bursage, white burrobrush, wolfberry, Indian ricegrass

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Greyeagle and similar soils

Composition: 0 to 1 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Desert needlegrass, Indian ricegrass, white bursage, shadscale, Nevada ephedra, creosotebush

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Tecopa and similar soils

Composition: 0 to 1 percent

Slope: 8 to 15 percent

Landform: Hills

Typical vegetation: Creosotebush, white bursage, Indian ricegrass, desert needlegrass, shadscale, ephedra, white burrobrush

Ecological site: 030XA067NV--Limy Hill 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2161--Casaga-Nowoy complex, 2 to 4 percent slopes***Map Unit Setting***

MLRA: 30

Landscape: Intermontane basin

Elevation: 2,000 to 2,400

Precipitation: 3 to 6 inches

Air temperature: 61 to 66 degrees Fahrenheit

Frost-free period: 210 to 240 days

Composition

Casaga gravelly loam, 2 to 4 percent slopes--55 percent
 Nowoy gravelly loamy fine sand, 2 to 4 percent slopes--30 percent
 Migern gravelly sandy loam, 2 to 4 percent slopes--8 percent
 Bluepoint loamy fine sand, 0 to 4 percent slopes--5 percent
 Typic Petrocalcids extremely gravelly fine sandy loam, 0 to 2 percent slopes--2 percent

Component Description

Casaga and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Desertholly, alkali sacaton, iodinebush, white bursage, shadscale, inland saltgrass, creosotebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 65 percent gravel
 Layer 1--0 to 1 inches; gravelly loam
 Layer 2--1 to 21 inches; clay loam
 Layer 3--21 to 41 inches; very gravelly clay loam
 Layer 4--41 to 60 inches; stratified very gravelly sandy loam to gravelly clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: High
 Permeability class (root zone): Slow
 Salinity: Saline within 40 inches
 Sodidity: Sodic within 40 inches
 Available water capacity: About 8 inches
 Present flooding: Rare
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XY025NV--Sodic Flat

Component Description

Nowoy and similar soils

Landform: Alluvial flats
 Parent material: Alluvium derived from mixed rocks over lacustrine deposits

Typical vegetation: White bursage, shadscale, cattle saltbush, inland saltgrass, pale wolfberry, white burrobrush

Typical profile:

Surface rock fragments: About 45 percent gravel, less than 1 percent cobbles
 Layer 1--0 to 3 inches; gravelly loamy fine sand
 Layer 2--3 to 20 inches; very gravelly sandy loam
 Layer 3--20 to 60 inches; clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Low
 Permeability class (root zone): Moderately slow
 Available water capacity: About 9 inches
 Present flooding: Rare
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA057NV--Dry Sodic Terrace 3-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Migern and similar soils

Composition: 0 to 8 percent
 Slope: 2 to 4 percent
 Landform: Alluvial flats
 Typical vegetation: Desertholly, seepweed, Sierra chinkapin, Indian ricegrass, Fremont dalea
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Bluepoint and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 4 percent
 Landform: Dunes
 Typical vegetation: Honey mesquite, Indian ricegrass, creosotebush, shadscale, catclaw, screwbean mesquite, fourwing saltbush, white bursage
 Ecological site: 030XY045NV--Shallow Gravelly Loam 8-10 P.Z.

Typic Petrocalcids and similar soils

Composition: 0 to 2 percent

Classification: Loamy-skeletal, carbonatic, thermic
 Typic Petrocalcids
 Slope: 0 to 2 percent
 Landform: Lake terraces
 Typical vegetation: Creosotebush, shadscale
 Ecological site: 030XA053NV--Calcareous Loam 3-5
 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2162--Casaga-Panor-Yermo association

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,000 to 2,400
 Precipitation: 3 to 6 inches
 Air temperature: 63 to 66 degrees Fahrenheit
 Frost-free period: 210 to 250 days

Composition

Casaga gravelly loam, 2 to 4 percent slopes--40 percent
 Panor clay loam, 2 to 4 percent slopes--25 percent
 Yermo very gravelly sandy loam, 2 to 4 percent slopes--20 percent
 Bluepoint loamy fine sand, 0 to 4 percent slopes--10 percent
 Typic Torriorthents very gravelly sandy loam, 0 to 4 percent slopes--5 percent

Component Description

Casaga and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Desertholly, seepweed, Fremont dalea, Indian ricegrass, shadscale

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 65 percent gravel
 Layer 1--0 to 1 inches; gravelly loam
 Layer 2--1 to 21 inches; clay loam
 Layer 3--21 to 41 inches; very gravelly clay loam
 Layer 4--41 to 60 inches; stratified gravelly sandy loam to very gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: High
 Permeability class (root zone): Slow
 Salinity: Saline within 40 inches
 Sodidity: Sodic within 40 inches
 Available water capacity: About 8 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Component Description

Panor and similar soils

Landform: Alluvial flats
 Parent material: Lacustrine deposits
 Typical vegetation: Pale wolfberry, Indian ricegrass, creosotebush, white bursage, shadscale, ephedra

Typical profile:

Surface rock fragments: About 5 percent gravel
 Layer 1--0 to 1 inches; clay loam
 Layer 2--1 to 5 inches; silt loam
 Layer 3--5 to 23 inches; clay loam
 Layer 4--23 to 60 inches; gravelly clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Medium
 Permeability class (root zone): Moderately slow
 Salinity: Saline within 40 inches
 Sodidity: Sodic within 40 inches
 Available water capacity: About 10 inches
 Present flooding: None
 Natural drainage class: Moderately well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, creosotebush, shadscale

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Bluepoint and similar soils

Composition: 0 to 10 percent

Slope: 0 to 4 percent

Landform: Dunes

Typical vegetation: Indian ricegrass, white bursage, catclaw, fourwing saltbush, shadscale, creosotebush, honey mesquite, screwbean mesquite

Ecological site: 030XY045NV--Shallow Gravelly Loam 8-10 P.Z.

Typic Torriorthents and similar soils

Composition: 0 to 5 percent

Classification: Loamy-skeletal, mixed, superactive, calcareous, thermic Typic Torriorthents

Slope: 0 to 4 percent

Landform: Alluvial flats

Typical vegetation: Fourwing saltbush, big galleta

Ecological site: 030XB032NV--Dry Floodplain

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2171--Sanwell-Skelon complex, 2 to 8 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Intermontane basin

Elevation: 2,300 to 2,700

Precipitation: 3 to 8 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Sanwell gravelly fine sandy loam, 2 to 4 percent slopes--60 percent

Skelon very gravelly sandy loam, 2 to 4 percent slopes--30 percent

Corbilt gravelly fine sandy loam, 0 to 4 percent slopes--5 percent

Typic Haplodurids gravelly sandy loam, 0 to 4 percent slopes--5 percent

Component Description

Sanwell and similar soils

Landform: Alluvial flats

Parent material: Lacustrine deposits

Typical vegetation: Desert needlegrass, Indian ricegrass, creosotebush, range ratany, shadscale, white bursage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel

Layer 1--0 to 9 inches; gravelly fine sandy loam

Layer 2--9 to 16 inches; gravelly fine sandy loam

Layer 3--16 to 31 inches; very gravelly coarse sandy loam

Layer 4--31 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low
 Permeability class (root zone): Moderate
 Sodicty: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description

Skelon and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Desert needlegrass, white bursage, white burrobrush, creosotebush, desert alysum, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 4 inches; very gravelly sandy loam
 Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam
 Layer 3--28 to 44 inches; indurated
 Layer 4--44 to 52 inches; very gravelly sandy loam
 Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 20 to 40 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Corbilt and similar soils
 Composition: 0 to 5 percent

Slope: 0 to 4 percent
 Landform: Fan skirts
 Typical vegetation: Indian ricegrass, range ratany, Nevada ephedra, white bursage, creosotebush, desert needlegrass
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Typic Haplodurids and similar soils

Composition: 0 to 5 percent
 Classification: Loamy, mixed, superactive, thermic, shallow Typic Haplodurids
 Slope: 0 to 4 percent
 Landform: Fan remnants
 Typical vegetation: Range ratany, shadscale, Indian ricegrass, desert needlegrass, creosotebush, white bursage
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Engineering" and "Soil Properties" sections

2172--Sanwell-Yermo association

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,300 to 2,700
 Precipitation: 3 to 6 inches
 Air temperature: 57 to 64 degrees Fahrenheit
 Frost-free period: 200 to 230 days

Composition

Sanwell gravelly fine sandy loam, 2 to 8 percent slopes--60 percent
 Yermo very gravelly sandy loam, 2 to 8 percent slopes--35 percent
 Shorim very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Sanwell and similar soils

Landform: Alluvial flats
 Parent material: Lacustrine deposits
 Typical vegetation: White bursage, shadscale, creosotebush, wolfberry, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel

Layer 1--0 to 9 inches; gravelly fine sandy loam
 Layer 2--9 to 16 inches; gravelly fine sandy loam
 Layer 3--16 to 31 inches; very gravelly coarse sandy loam
 Layer 4--31 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Medium
 Permeability class (root zone): Moderate
 Sodcity: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Indian ricegrass, desert needlegrass, wolfberry, creosotebush, shadscale, white bursage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 6 inches; very gravelly sandy loam
 Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Shorim and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 4 percent
 Landform: Rock pediments
 Typical vegetation: Desert needlegrass, Indian ricegrass, wolfberry, shadscale, creosotebush, white bursage
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2181--Skelon-Yermo-Pinez complex, 0 to 4 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,300 to 3,000
 Precipitation: 3 to 7 inches
 Air temperature: 61 to 66 degrees Fahrenheit
 Frost-free period: 190 to 230 days

Composition

Skelon gravelly sandy loam, 2 to 4 percent slopes--30 percent
 Yermo very gravelly sandy loam, 0 to 2 percent slopes--30 percent
 Pinez very gravelly loamy sand, 2 to 4 percent slopes--25 percent
 Lealandic very gravelly sandy loam, 2 to 4 percent slopes--8 percent
 Arizo very gravelly loamy sand, 2 to 4 percent slopes--4 percent
 Migern gravelly sandy loam, 2 to 4 percent slopes--3 percent

Component Description**Skelon and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, creosotebush, shadscale

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; gravelly sandy loam

Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam

Layer 3--28 to 44 inches; indurated

Layer 4--44 to 52 inches; very gravelly sandy loam

Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: High

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description**Yermo and similar soils**

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, creosotebush, shadscale

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description**Pinez and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, wolfberry, shadscale, creosotebush, ephedra, cattle saltbush, white bursage

Typical profile:

Surface rock fragments: About 5 percent stones, 10 percent cobbles, 65 percent gravel

Layer 1--0 to 4 inches; very gravelly loamy sand

Layer 2--4 to 10 inches; very gravelly sandy loam

Layer 3--10 to 29 inches; very gravelly sandy clay loam

Layer 4--29 to 41 inches; extremely gravelly loamy sand

Layer 5--41 to 51 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Lealandic and similar soils

Composition: 0 to 8 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Shadscale, Indian ricegrass, creosotebush, wolfberry, ephedra

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Arizo and similar soils

Composition: 0 to 4 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Indian ricegrass, creosotebush, white burrobrush, white bursage, cattle saltbush

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Migern and similar soils

Composition: 0 to 3 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Nevada ephedra, spiny menodora, winterfat, spiny hopsage, shadscale, fourwing saltbush, white bursage, Indian ricegrass, desert needlegrass

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2184--Skelon-Bullfor association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,500 to 4,200

Precipitation: 3 to 7 inches

Air temperature: 61 to 64 degrees Fahrenheit

Frost-free period: 210 to 240 days

Composition

Skelon gravelly sandy loam, 0 to 2 percent slopes--60 percent

Bullfor gravelly loamy sand, 0 to 2 percent slopes--25 percent

Yermo very gravelly sandy loam, 0 to 2 percent slopes--10 percent

Corbilt gravelly fine sandy loam, 0 to 2 percent slopes--5 percent

Component Description

Skelon and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Fourwing saltbush, spiny menodora, Indian ricegrass, desert needlegrass, white bursage, winterfat, shadscale, Nevada ephedra, spiny hopsage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; gravelly sandy loam

Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam

Layer 3--28 to 44 inches; indurated

Layer 4--44 to 52 inches; very gravelly sandy loam

Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: High

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Bullfor and similar soils

Landform: Sand sheets

Parent material: Eolian sands and alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, white bursage, fourwing saltbush, shadscale, Nevada ephedra, Indian ricegrass, spiny hopsage, winterfat, spiny menodora

Typical profile:

Surface rock fragments: About 50 percent gravel
 Layer 1--0 to 1 inches; gravelly loamy sand
 Layer 2--1 to 24 inches; loamy sand
 Layer 3--24 to 25 inches; indurated
 Layer 4--25 to 60 inches; very gravelly sandy loam

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Medium
 Depth to restrictive feature: Duripan: 20 to 40 inches
 Permeability class (root zone): Rapid
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in
 characteristics are in the "Classification of the Soils"
 section.

Contrasting Inclusions**Yermo and similar soils**

Composition: 0 to 10 percent
 Slope: 0 to 2 percent
 Landform: Inset fans
 Typical vegetation: Spiny menodora, winterfat, spiny
 hopsage, Nevada ephedra, fourwing saltbush, white
 bursage, shadscale, Indian ricegrass, desert
 needlegrass
 Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Corbilt and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 2 percent
 Landform: Fan skirts
 Typical vegetation: Spiny menodora, winterfat, Indian
 ricegrass, desert needlegrass, white bursage,
 fourwing saltbush, shadscale, Nevada ephedra, spiny
 hopsage
 Ecological site: 030XA051NV--Cobbly Loam 5-8 P.Z.

Management

For information about managing this map unit, see
 the following sections and associated tables in Part II
 of this publication:
 "Range" section

"Engineering" and "Soil Properties" sections

2185--Skelon-Yermo-Ashmed complex, 4 to 15 percent slopes***Map Unit Setting***

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,500 to 2,700
 Precipitation: 3 to 8 inches
 Air temperature: 59 to 65 degrees Fahrenheit
 Frost-free period: 200 to 230 days

Composition

Skelon very gravelly sandy loam, 4 to 15 percent
 slopes--50 percent
 Yermo very gravelly sandy loam, 4 to 15 percent
 slopes--30 percent
 Ashmed gravelly fine sandy loam, 4 to 8 percent
 slopes--15 percent
 Arizo very gravelly loamy sand, 4 to 15 percent
 slopes--5 percent

Component Description**Skelon and similar soils**

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock
 sources
 Typical vegetation: White bursage, white burrobrush,
 creosotebush, desert alysum, Indian ricegrass, desert
 needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones,
 2 percent cobbles, about 60 percent gravel
 Layer 1--0 to 4 inches; very gravelly sandy loam
 Layer 2--4 to 28 inches; stratified very gravelly fine
 sandy loam to very gravelly coarse sandy loam
 Layer 3--28 to 44 inches; indurated
 Layer 4--44 to 52 inches; very gravelly sandy loam
 Layer 5--52 to 60 inches; extremely gravelly coarse
 sand

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 4 to 15 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 20 to 40 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 2 inches

Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Creosotebush, wolfberry, Indian ricegrass, desert needlegrass, shadscale, white bursage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
Layer 1--0 to 6 inches; very gravelly sandy loam
Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
Runoff: Low
Permeability class (root zone): Moderately rapid
Available water capacity: About 4 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description

Ashmed and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Seepweed, desertholly, Fremont dalea, shadscale, Indian ricegrass

Typical profile:

Surface rock fragments: About 10 percent cobbles, 60 percent gravel
Layer 1--0 to 4 inches; gravelly fine sandy loam
Layer 2--4 to 7 inches; gravelly silt loam
Layer 3--7 to 24 inches; extremely gravelly sandy clay loam

Layer 4--24 to 32 inches; extremely gravelly coarse sandy loam
Layer 5--32 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
Runoff: High
Permeability class (root zone): Moderately slow
Salinity: Saline within 40 inches
Sodicity: Sodic within 40 inches
Available water capacity: About 5 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Arizo and similar soils

Composition: 0 to 5 percent
Slope: 4 to 15 percent
Landform: Summits of inset fans
Typical vegetation: Bud sagebrush, desert needlegrass, Nevada ephedra, shadscale, white bursage, Indian ricegrass, creosotebush, big galleta, spiny menodora
Ecological site: 030XB031NV--Shallow Limy 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
"Range" section
"Engineering" and "Soil Properties" sections

2186--Yermo-Skelon-Pinez complex, 4 to 15 percent slopes

Map Unit Setting

MLRA: 30
Landscape: Fan piedmont
Elevation: 2,500 to 3,000
Precipitation: 3 to 7 inches

Air temperature: 61 to 64 degrees Fahrenheit
Frost-free period: 190 to 230 days

Composition

Yermo very gravelly sandy loam, 0 to 2 percent slopes--35 percent
Skelon gravelly sandy loam, 2 to 4 percent slopes--35 percent
Pinez very gravelly loamy sand, 2 to 4 percent slopes--15 percent
Lealandic very gravelly sandy loam, 2 to 4 percent slopes--5 percent
Sanwell gravelly fine sandy loam, 2 to 4 percent slopes--5 percent
Migern gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Yermo and similar soils

Landform: Inset fans
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: White bursage, range ratany, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
Layer 1--0 to 6 inches; very gravelly sandy loam
Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
Runoff: Very low
Permeability class (root zone): Moderately rapid
Available water capacity: About 4 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description

Skelon and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Creosotebush, desert needlegrass, bud sagebrush, shadscale, Nevada ephedra, Anderson wolfberry

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel
Layer 1--0 to 4 inches; gravelly sandy loam
Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam
Layer 3--28 to 44 inches; indurated
Layer 4--44 to 52 inches; very gravelly sandy loam
Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
Runoff: High
Depth to restrictive feature: Duripan: 20 to 40 inches
Permeability class (root zone): Moderately rapid
Available water capacity: About 2 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description

Pinez and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Desert needlegrass, Indian ricegrass, wolfberry, creosotebush, ephedra, shadscale, white bursage

Typical profile:

Surface rock fragments: About 5 percent stones, 10 percent cobbles, 65 percent gravel
Layer 1--0 to 4 inches; very gravelly loamy sand
Layer 2--4 to 10 inches; very gravelly sandy loam
Layer 3--10 to 29 inches; very gravelly sandy clay loam
Layer 4--29 to 41 inches; extremely gravelly loamy sand
Layer 5--41 to 51 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Lealandic and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Wolfberry, creosotebush, Indian ricegrass, shadscale, ephedra

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Sanwell and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Big galleta, desert needlegrass, white bursage, range ratany, creosotebush, ephedra, bush muhly

Ecological site: 030XB007NV--Granitic Loam 5-8 P.Z.

Migern and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: White bursage, spiny menodora, winterfat, spiny hopsage, Nevada ephedra, shadscale, Indian ricegrass, desert needlegrass, fourwing saltbush

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2191--Pinez-Lealandic-Arizo association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,000 to 3,000

Precipitation: 3 to 7 inches

Air temperature: 61 to 64 degrees Fahrenheit

Frost-free period: 190 to 210 days

Composition

Pinez very gravelly loamy sand, 2 to 4 percent slopes--40 percent

Lealandic very gravelly sandy loam, 2 to 4 percent slopes--35 percent

Arizo very gravelly sandy loam, 0 to 2 percent slopes--20 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Pinez and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Cattle saltbush, ephedra, creosotebush, wolfberry, Indian ricegrass, shadscale, white bursage

Typical profile:

Surface rock fragments: About 5 percent stones, 10 percent cobbles, 65 percent gravel

Layer 1--0 to 4 inches; very gravelly loamy sand

Layer 2--4 to 10 inches; very gravelly sandy loam

Layer 3--10 to 29 inches; very gravelly sandy clay loam

Layer 4--29 to 41 inches; extremely gravelly loamy sand

Layer 5--41 to 51 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Lealandic and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Indian ricegrass, wolfberry, shadscale, ephedra, creosotebush

Typical profile:

Surface rock fragments: About 1 percent stones, 2 percent cobbles, 40 percent gravel
Layer 1--0 to 5 inches; very gravelly sandy loam
Layer 2--5 to 12 inches; gravelly sandy clay
Layer 3--12 to 23 inches; very gravelly sandy clay
Layer 4--23 to 40 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
Runoff: High
Depth to restrictive feature: Duripan: 20 to 40 inches
Permeability class (root zone): Slow
Available water capacity: About 2 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Arizo and similar soils

Landform: Drainageways
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Indian ricegrass, creosotebush, white burrobrush, cattle saltbush, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel
Layer 1--0 to 8 inches; very gravelly sandy loam

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
Runoff: Very low
Permeability class (root zone): Moderately rapid
Available water capacity: About 3 inches
Present flooding: Rare
Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yermo and similar soils

Composition: 0 to 5 percent
Slope: 2 to 4 percent
Landform: Alluvial fans
Typical vegetation: Desert needlegrass, Indian ricegrass, white bursage, shadscale, creosotebush, wolfberry
Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

2201--Corbilt-Arizo complex, 2 to 4 percent slopes

Map Unit Setting

MLRA: 30
Landscape: Fan piedmont
Elevation: 2,400 to 2,800
Precipitation: 3 to 7 inches
Air temperature: 61 to 68 degrees Fahrenheit
Frost-free period: 200 to 220 days

Composition

Corbilt very gravelly sandy loam, 2 to 4 percent slopes--65 percent

Arizo very gravelly sandy loam, 2 to 4 percent slopes--30 percent

Greyeagle very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Corbilt and similar soils

Landform: Alluvial fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, Indian ricegrass, wolfberry, white burrobrush, shadscale, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel,
Layer 1--0 to 4 inches; very gravelly sandy loam
Layer 2--4 to 32 inches; gravelly fine sandy loam
Layer 3--32 to 56 inches; very gravelly sandy loam
Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Component Description

Arizo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, white bursage, cattle saltbush, white burrobrush, creosotebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel
Layer 1--0 to 8 inches; very gravelly sandy loam
Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: Rare

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Greyeagle and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: White bursage, shadscale, Nevada ephedra, creosotebush, Indian ricegrass, desert needlegrass

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2202--Corbilt-Migern-Arizo association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,500 to 4,000

Precipitation: 3 to 8 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 190 to 220 days

Composition

Corbilt gravelly fine sandy loam, 2 to 8 percent slopes--50 percent

Migern gravelly sandy loam, 2 to 8 percent slopes--25 percent

Arizo very gravelly sandy loam, 2 to 4 percent slopes--20 percent

Lealandic very gravelly sandy loam, 4 to 8 percent slopes--5 percent

Component Description

Corbilt and similar soils

Landform: Fan skirts

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny hopsage, Nevada ephedra, spiny menodora, winterfat, shadscale, fourwing saltbush, white bursage, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel
Layer 1--0 to 4 inches; gravelly fine sandy loam
Layer 2--4 to 32 inches; gravelly fine sandy loam
Layer 3--32 to 56 inches; very gravelly sandy loam
Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Low

Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 6 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Migern and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from volcanic rock sources

Typical vegetation: Winterfat, desert needlegrass, spiny menodora, Indian ricegrass, white bursage, fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 65 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 8 inches; gravelly clay loam

Layer 3--8 to 60 inches; gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Permeability class (root zone): Moderately slow

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Arizo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Cattle saltbush, white burrobrush, creosotebush, Indian ricegrass, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel

Layer 1--0 to 8 inches; very gravelly sandy loam

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: Rare

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Lealandic and similar soils

Composition: 0 to 5 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: Spiny hopsage, Nevada ephedra, spiny menodora, Indian ricegrass, desert needlegrass, white bursage, fourwing saltbush, shadscale, winterfat

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2204--Corbilt-Wodavar-Sanwell association

Map Unit Setting

MLRA: 30

Landscape: Intermontane basin

Elevation: 2,300 to 2,800

Precipitation: 3 to 7 inches

Air temperature: 60 to 65 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Corbilt gravelly fine sandy loam, 2 to 4 percent slopes--40 percent

Wodavar extremely gravelly fine sandy loam, 2 to 8 percent slopes--25 percent

Sanwell gravelly fine sandy loam, 2 to 8 percent slopes--25 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Shorim very gravelly sandy loam, 0 to 2 percent slopes--5 percent

Component Description

Corbilt and similar soils

Landform: Fan skirts

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, Indian ricegrass, creosotebush, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel
Layer 1--0 to 4 inches; gravelly fine sandy loam
Layer 2--4 to 32 inches; gravelly fine sandy loam
Layer 3--32 to 56 inches; very gravelly sandy loam
Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 6 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Wodavar and similar soils

Landform: Lake terraces

Parent material: Lacustrine deposits

Typical vegetation: Indian ricegrass, creosotebush, shadscale

Typical profile:

Surface rock fragments: About 1 percent cobbles, 65 percent gravel

Layer 1--0 to 3 inches; extremely gravelly fine sandy loam

Layer 2--3 to 16 inches; very gravelly sandy loam

Layer 3--16 to 33 inches; indurated

Layer 4--33 to 60 inches; very gravelly loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very high

Depth to restrictive feature: Petrocalcic: 10 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.9 inches

Present flooding: None
 Present ponding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA047NV--Barren Fan 3-8 P.Z.

Component Description

Sanwell and similar soils

Landform: Alluvial flats
 Parent material: Lacustrine deposits
 Typical vegetation: Indian ricegrass, wolfberry, white bursage, shadscale, creosotebush, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 9 inches; gravelly fine sandy loam
 Layer 2--9 to 16 inches; gravelly fine sandy loam
 Layer 3--16 to 31 inches; very gravelly coarse sandy loam
 Layer 4--31 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Medium
 Permeability class (root zone): Moderate
 Sodicity: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yermo and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 4 percent
 Landform: Alluvial fans
 Typical vegetation: Shadscale, creosotebush, Indian ricegrass
 Ecological site: 030XA047NV--Barren Fan 3-8 P.Z.

Shorim and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 2 percent
 Landform: Rock pediments
 Typical vegetation: White bursage, wolfberry, creosotebush, shadscale, Indian ricegrass, desert needlegrass
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Engineering" and "Soil Properties" sections

2212--Yermo-Bullfor association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,500 to 4,200
 Precipitation: 3 to 70 inches
 Air temperature: 58 to 64 degrees Fahrenheit
 Frost-free period: 210 to 230 days

Composition

Yermo very gravelly sandy loam, 2 to 4 percent slopes--70 percent
 Bullfor gravelly loamy sand, 2 to 4 percent slopes--20 percent
 Sanwell gravelly fine sandy loam, 2 to 4 percent slopes--5 percent
 Corbitt gravelly fine sandy loam, 2 to 4 percent slopes--3 percent
 Greyeagle very gravelly sandy loam, 2 to 4 percent slopes--2 percent

Component Description

Yermo and similar soils

Landform: Alluvial fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Spiny menodora, winterfat, Indian ricegrass, desert needlegrass, white bursage, fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Bullfor and similar soils

Landform: Sand sheets

Parent material: Eolian sands and alluvium derived from mixed rock sources

Typical vegetation: Spiny menodora, winterfat, spiny hopsage, shadscale, fourwing saltbush, white bursage, Nevada ephedra, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 50 percent gravel

Layer 1--0 to 1 inches; gravelly loamy sand

Layer 2--1 to 24 inches; loamy sand

Layer 3--24 to 25 inches; indurated

Layer 4--25 to 60 inches; very gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Sanwell and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Spiny menodora, winterfat, Indian ricegrass, desert needlegrass, white bursage, fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Corbilt and similar soils

Composition: 0 to 3 percent

Slope: 2 to 4 percent

Landform: Fan skirts

Typical vegetation: Shadscale, white bursage, Indian ricegrass, desert needlegrass, spiny menodora, fourwing saltbush, winterfat, Nevada ephedra, spiny hopsage

Ecological site: 030XA051NV--Cobbly Loam 5-8 P.Z.

Greyeagle and similar soils

Composition: 0 to 2 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Spiny menodora, ephedra, white bursage, desert needlegrass, Indian ricegrass, shadscale, Anderson wolfberry

Ecological site: 030XA044NV--Loamy Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2214--Yermo-Arizo association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,500 to 4,100

Precipitation: 4 to 7 inches

Air temperature: 57 to 64 degrees Fahrenheit

Frost-free period: 210 to 230 days

Composition

Yermo very gravelly sandy loam, 2 to 4 percent slopes--65 percent

Arizo very gravelly sandy loam, 2 to 4 percent slopes--30 percent

Greyeagle very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description**Yermo and similar soils**

Landform: Alluvial fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bud sagebrush, shadscale, Nevada ephedra, creosotebush, Anderson wolfberry, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description**Arizo and similar soils**

Landform: Drainageways

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Cattle saltbush, creosotebush, desert needlegrass, bladdersage, Indian ricegrass, white burrobrush, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel

Layer 1--0 to 8 inches; very gravelly sandy loam

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Greyeagle and similar soils**

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Desert needlegrass, creosotebush, white bursage, Indian ricegrass, range ratany, shadscale

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2215--Yermo-Greyeagle association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,500 to 4,000

Precipitation: 4 to 6 inches

Air temperature: 57 to 64 degrees Fahrenheit

Frost-free period: 210 to 260 days

Composition

Yermo very gravelly sandy loam, 2 to 4 percent slopes--60 percent
 Greyeagle very gravelly sandy loam, 2 to 4 percent slopes--25 percent
 Lealandic very gravelly sandy loam, 2 to 4 percent slopes--5 percent
 Arizo very gravelly loamy sand, 2 to 4 percent slopes--5 percent
 Sanwell gravelly fine sandy loam, 2 to 4 percent slopes--5 percent

Component Description**Yermo and similar soils**

Landform: Alluvial fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny menodora, winterfat, Indian ricegrass, desert needlegrass, white bursage, fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 6 inches; very gravelly sandy loam
 Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description**Greyeagle and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, Indian ricegrass, white burrobrush, shadscale, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 6 inches; gravelly sandy loam
 Layer 3--6 to 8 inches; very gravelly sandy loam
 Layer 4--8 to 24 inches; indurated
 Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.6 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Lealandic and similar soils**

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Winterfat, spiny menodora, Indian ricegrass, desert needlegrass, white bursage, fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Arizo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: White bursage, cattle saltbush, white burrobrush, creosotebush, Indian ricegrass
 Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Sanwell and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: White burrobrush, white bursage, desert needlegrass, Indian ricegrass, shadscale
Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Crops and Pasture" section
"Engineering" and "Soil Properties" sections

2216--Yermo-Arizo complex, 2 to 4 percent slopes

Map Unit Setting

MLRA: 30
Landscape: Fan piedmont
Elevation: 2,500 to 4,100
Precipitation: 4 to 7 inches
Air temperature: 57 to 66 degrees Fahrenheit
Frost-free period: 200 to 230 days

Composition

Yermo very gravelly sandy loam, 2 to 4 percent slopes--65 percent
Arizo very gravelly loamy sand, 2 to 4 percent slopes--20 percent
Sanwell gravelly fine sandy loam, 2 to 4 percent slopes--8 percent
Bluepoint loamy fine sand, 0 to 4 percent slopes--7 percent

Component Description

Yermo and similar soils

Landform: Inset fans
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Shadscale, Nevada ephedra, spiny hopsage, winterfat, spiny menodora, white bursage, fourwing saltbush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
Layer 1--0 to 6 inches; very gravelly sandy loam
Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
Runoff: Very low
Permeability class (root zone): Moderately rapid
Available water capacity: About 4 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Arizo and similar soils

Landform: Drainageways
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Cattle saltbush, white burrobrush, Indian ricegrass, creosotebush, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel
Layer 1--0 to 8 inches; very gravelly loamy sand
Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
Runoff: Negligible
Permeability class (root zone): Rapid
Available water capacity: About 3 inches
Present flooding: Rare
Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Sanwell and similar soils

Composition: 0 to 8 percent
Slope: 2 to 4 percent
Landform: Fan remnants

Typical vegetation: Creosotebush, Anderson wolfberry, desert needlegrass, bud sagebrush, shadscale, Nevada ephedra
Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Bluepoint and similar soils

Composition: 0 to 7 percent

Slope: 0 to 4 percent

Landform: Dunes

Typical vegetation: Shadscale, fourwing saltbush, catchaw, white bursage, screwbean mesquite, creosotebush, Indian ricegrass, honey mesquite
Ecological site: 030XY045NV--Shallow Gravelly Loam 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2218--Sanwell-Commski association

Map Unit Setting

MLRA: 30

Landscape: Intermontane basin

Elevation: 2,300 to 2,700

Precipitation: 3 to 6 inches

Air temperature: 65 to 68 degrees Fahrenheit

Frost-free period: 210 to 240 days

Composition

Sanwell gravelly fine sandy loam, 2 to 4 percent slopes--50 percent

Commski very gravelly fine sandy loam, 2 to 4 percent slopes--45 percent

Casaga gravelly loam, 2 to 4 percent slopes--5 percent

Component Description

Sanwell and similar soils

Landform: Alluvial flats

Parent material: Lacustrine deposits

Typical vegetation: White bursage, shadscale, wolfberry, Indian ricegrass, desert needlegrass, creosotebush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel

Layer 1--0 to 9 inches; gravelly fine sandy loam

Layer 2--9 to 16 inches; gravelly fine sandy loam

Layer 3--16 to 31 inches; very gravelly coarse sandy loam

Layer 4--31 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low

Permeability class (root zone): Moderate

Sodicity: Sodic within 40 inches

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Commski and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Dalea, desertholly, seepweed, wolfberry, shadscale

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam

Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Casaga and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Spiny menodora, desert needlegrass, Indian ricegrass, big galleta, white bursage, bud sagebrush, shadscale, Nevada ephedra, creosotebush

Ecological site: 030XB031NV--Shallow Limy 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2220--Canoto-Arizo complex, 2 to 4 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,500 to 4,200

Precipitation: 4 to 7 inches

Air temperature: 57 to 66 degrees Fahrenheit

Frost-free period: 200 to 240 days

Composition

Canoto very gravelly loam, 2 to 4 percent slopes--65 percent

Arizo very gravelly sandy loam, 2 to 4 percent slopes--20 percent

Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--9 percent

Vace gravelly sandy loam, 2 to 4 percent slopes--2 percent

Lealandic very gravelly sandy loam, 4 to 8 percent slopes--2 percent

Jonnic gravelly loam, 4 to 8 percent slopes--2 percent

Component Description

Canoto and similar soils

Landform: Alluvial fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Wolfberry, shadscale, creosotebush, ephedra, big galleta, Indian ricegrass, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 50 percent gravel

Layer 1--0 to 11 inches; very gravelly loam

Layer 2--11 to 60 inches; stratified gravelly loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low

Permeability class (root zone): Moderate

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Component Description

Arizo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Creosotebush, white burrobrush, white bursage, hollyleaf bursage, desertwillow, big galleta

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel

Layer 1--0 to 8 inches; very gravelly sandy loam

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 030XB028NV--Valley Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Niavi and similar soils

Composition: 0 to 9 percent

Slope: 2 to 8 percent

Landform: Stream terraces

Typical vegetation: Range ratany, big galleta, Anderson's wolfberry, white bursage, Mojave buckwheat, ephedra, creosotebush, Virgin River encelia

Ecological site: 030XB134NV--Quartzite Outwash

Vace and similar soils

Composition: 0 to 2 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Shadscale, Nevada ephedra, big galleta, creosotebush, Indian ricegrass, white bursage

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Lealandic and similar soils

Composition: 0 to 2 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: Range ratany, white bursage, creosotebush, spiny menodora

Ecological site: 030XA071NV--Cobbly Claypan 5-7 P.Z.

Jonnic and similar soils

Composition: 0 to 2 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: Mojave buckwheat, ephedra, blackbrush, white bursage, desert needlegrass, Indian ricegrass

Ecological site: 030XA093NV--Quartzite Fan 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2221--Sanwell-Greyeagle association

Map Unit Setting

MLRA: 30

Landscape: Intermontane basin

Elevation: 2,300 to 2,700

Precipitation: 3 to 7 inches

Air temperature: 63 to 68 degrees Fahrenheit

Frost-free period: 210 to 250 days

Composition

Sanwell gravelly fine sandy loam, 2 to 4 percent slopes--60 percent

Greyeagle very gravelly sandy loam, 2 to 4 percent slopes--30 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--7 percent

Cobatus loam, 2 to 4 percent slopes--3 percent

Component Description

Sanwell and similar soils

Landform: Alluvial flats

Parent material: Lacustrine deposits

Typical vegetation: Bud sagebrush, shadscale, Nevada ephedra, creosotebush, Anderson wolfberry, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel

Layer 1--0 to 9 inches; gravelly fine sandy loam

Layer 2--9 to 16 inches; gravelly fine sandy loam

Layer 3--16 to 31 inches; very gravelly coarse sandy loam

Layer 4--31 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low

Permeability class (root zone): Moderate

Sodicity: Sodic within 40 inches

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description

Greyeagle and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, white burrobrush, shadscale, Indian ricegrass, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 6 inches; gravelly sandy loam

Layer 3--6 to 8 inches; very gravelly sandy loam

Layer 4--8 to 24 inches; indurated

Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.6 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yermo and similar soils

Composition: 0 to 7 percent

Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: Shadscale, Indian ricegrass, desert needlegrass, white bursage, white burrobrush

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Cobatus and similar soils

Composition: 0 to 3 percent

Slope: 2 to 4 percent

Landform: Alluvial flats

Typical vegetation: Bottlebrush squirreltail, bud sagebrush, Indian ricegrass, black greasewood, shadscale

Ecological site: 029XY024NV--Sodic Terrace 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2222--Niavi-Jonnic association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,000 to 4,600

Precipitation: 7 to 9 inches

Air temperature: 57 to 64 degrees Fahrenheit

Frost-free period: 180 to 250 days

Composition

Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--55 percent

Jonnic gravelly loam, 2 to 8 percent slopes--35 percent

Arizo very gravelly sandy loam, 2 to 8 percent slopes--5 percent

Canoto very gravelly sandy loam, 2 to 8 percent slopes--3 percent

Riverwash extremely gravelly coarse sand, 0 to 4 percent slopes--2 percent

Component Description

Niavi and similar soils

Landform: Stream terraces

Parent material: Alluvium derived from quartzite

Typical vegetation: Anderson's wolfberry, Virgin River encelia, creosotebush, ephedra, Mojave buckwheat, white bursage, big galleta, range ratany

Typical profile:

Surface rock fragments: About 1 percent stones, 35 percent cobbles, 40 percent gravel

Layer 1--0 to 2 inches; extremely cobbly fine sandy loam

Layer 2--2 to 8 inches; extremely gravelly coarse sandy loam

Layer 3--8 to 29 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam

Layer 4--29 to 60 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
Runoff: Very low
Permeability class (root zone): Moderately rapid
Available water capacity: About 2 inches
Present flooding: Occasional
Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XB134NV--Quartzite Outwash

Component Description

Jonnic and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Mojave buckwheat, ephedra, blackbrush, white bursage, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 3 percent cobbles, 55 percent gravel
Layer 1--0 to 2 inches; gravelly loam
Layer 2--2 to 21 inches; very gravelly clay
Layer 3--21 to 38 inches; extremely cobbly sandy clay loam
Layer 4--38 to 42 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
Runoff: Very high
Depth to restrictive feature: Duripan: 25 to 40 inches
Permeability class (root zone): Slow
Available water capacity: About 3 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA093NV--Quartzite Fan 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Arizo and similar soils

Composition: 0 to 5 percent
Slope: 2 to 8 percent
Landform: Drainageways
Typical vegetation: White burrobrush, hollyleaf bursage, creosotebush, desertwillow, white bursage, big galleta
Ecological site: 030XB028NV--Valley Wash

Canoto and similar soils

Composition: 0 to 3 percent
Slope: 2 to 8 percent
Landform: Inset fans
Typical vegetation: Creosotebush, big galleta, Indian ricegrass, wolfberry, white bursage, ephedra, shadscale
Ecological site: 030XB005NV--Limy 5-7 P.Z.

Riverwash

Composition: 0 to 2 percent
Slope: 0 to 4 percent
Landform: Channels
Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
"Range" section
"Engineering" and "Soil Properties" sections

2230--Yermo-Skelon association

Map Unit Setting

MLRA: 30
Landscape: Fan piedmont
Elevation: 2,500 to 4,100
Precipitation: 3 to 6 inches
Air temperature: 61 to 68 degrees Fahrenheit
Frost-free period: 200 to 230 days

Composition

Yermo very gravelly sandy loam, 2 to 4 percent slopes--60 percent
Skelon gravelly sandy loam, 2 to 4 percent slopes--25 percent
Arizo very gravelly loamy sand, 2 to 4 percent slopes--10 percent
Strozi gravelly fine sandy loam, 2 to 4 percent slopes--5 percent

Component Description**Yermo and similar soils**

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bud sagebrush, shadscale, Nevada ephedra, creosotebush, Anderson wolfberry, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description**Skelon and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, Nevada ephedra, bud sagebrush, Anderson wolfberry, creosotebush, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; gravelly sandy loam

Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam

Layer 3--28 to 44 inches; indurated

Layer 4--44 to 52 inches; very gravelly sandy loam

Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: High

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Arizo and similar soils**

Composition: 0 to 10 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Creosotebush, Indian ricegrass, desert needlegrass, bladdersage, cattle saltbush, white burrobrush, white bursage

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Strozi and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, desert needlegrass, white bursage, winterfat, spiny hopsage, Nevada ephedra, shadscale, spiny menodora, fourwing saltbush

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2233--Yermo-Skelon-Bluepoint association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont
 Elevation: 2,500 to 4,100
 Precipitation: 3 to 7 inches
 Air temperature: 55 to 63 degrees Fahrenheit
 Frost-free period: 200 to 230 days

Composition

Yermo very gravelly sandy loam, 4 to 8 percent slopes--35 percent
 Skelon gravelly sandy loam, 4 to 8 percent slopes--25 percent
 Bluepoint loamy fine sand, 8 to 15 percent slopes--25 percent
 Arizo very gravelly loamy sand, 2 to 8 percent slopes--8 percent
 Migern gravelly sandy loam, 4 to 8 percent slopes--7 percent

Component Description

Yermo and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Creosotebush, desert needlegrass, bud sagebrush, shadscale, Anderson wolfberry, Nevada ephedra

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 6 inches; very gravelly sandy loam
 Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
 Runoff: Low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description

Skelon and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bud sagebrush, shadscale, Nevada ephedra, desert needlegrass, Anderson wolfberry, creosotebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 4 inches; gravelly sandy loam
 Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam
 Layer 3--28 to 44 inches; indurated
 Layer 4--44 to 52 inches; very gravelly sandy loam
 Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 20 to 40 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description

Bluepoint and similar soils

Landform: Sand sheets
 Parent material: Eolian sands
 Typical vegetation: Fourwing saltbush, winterfat, creosotebush, Indian ricegrass, sand dropseed, desert needlegrass, white bursage

Typical profile:

Layer 1--0 to 9 inches; loamy fine sand
 Layer 2--9 to 17 inches; stratified fine sand to gravelly loamy fine sand
 Layer 3--17 to 41 inches; fine sand
 Layer 4--41 to 60 inches; stratified sand to very fine sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA069NV--Limy Sand 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Arizo and similar soils**

Composition: 0 to 8 percent
 Slope: 2 to 8 percent
 Landform: Drainageways
 Typical vegetation: Desert needlegrass, bladdersage, Indian ricegrass, creosotebush, white burrobrush, cattle saltbush, white bursage
 Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Migern and similar soils

Composition: 0 to 7 percent
 Slope: 4 to 8 percent
 Landform: Fan remnants
 Typical vegetation: Anderson wolfberry, creosotebush, Nevada ephedra, shadscale, bud sagebrush, desert needlegrass
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2250--Tokoper-Upspring-Rock outcrop association***Map Unit Setting***

MLRA: 29
 Landscape: Hills
 Elevation: 3,800 to 4,200
 Precipitation: 4 to 8 inches
 Air temperature: 51 to 60 degrees Fahrenheit
 Frost-free period: 190 to 250 days

Composition

Tokoper very cobbly sandy loam, 8 to 15 percent slopes--40 percent
 Upspring very gravelly sandy loam, 15 to 50 percent slopes--30 percent
 Rock outcrop--15 percent
 Downeyville very gravelly sandy loam, 8 to 15 percent slopes--10 percent
 Haleburu Family very gravelly sandy loam, 15 to 50 percent slopes--5 percent

Component Description**Tokoper and similar soils**

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Shadscale, spiny horsebrush, desert needlegrass, Nevada ephedra, galleta, wolfberry, spiny menodora, Indian ricegrass, black greasewood

Typical profile:

Surface rock fragments: About 5 percent stones, 15 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; very cobbly sandy loam
 Layer 2--3 to 9 inches; very gravelly clay loam
 Layer 3--9 to 14 inches; extremely gravelly loam
 Layer 4--14 to 15 inches; indurated
 Layer 5--15 to 25 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Bedrock (lithic): 8 to 15 inches
 Permeability class (root zone): Moderately slow
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description**Upspring and similar soils**

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: White bursage, shadscale, ephedra, desert needlegrass, Indian ricegrass, spiny menodora, creosotebush, winterfat

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 2 inches; very gravelly sandy loam
 Layer 2--2 to 12 inches; very gravelly fine sandy loam
 Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.8 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA068NV--Calcareous Hill 5-8 P.Z.

Component Description

Rock outcrop
 Landform: Hills

Component Properties and Qualities

Slope: 8 to 50

Interpretive Groups

Nonirrigated land capability: Not determined
 Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Downeyville and similar soils

Composition: 0 to 10 percent
 Slope: 8 to 15 percent
 Landform: Hills
 Typical vegetation: Bottlebrush squirreltail, desert needlegrass, black greasewood, Indian ricegrass, spiny menodora, galleta, winterfat, Nevada ephedra, dalea, bud sagebrush, shadscale

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Haleburu Family and similar soils

Composition: 0 to 5 percent
 Classification: Loamy-skeletal, mixed, superactive, calcareous, thermic Lithic Torriorthents
 Slope: 15 to 50 percent
 Landform: Hills
 Typical vegetation: White bursage, shadscale, ephedra, winterfat, creosotebush, spiny menodora, Indian ricegrass, desert needlegrass
 Ecological site: 030XA068NV--Calcareous Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2251--Tokoper-Downeyville-Pintwater association

Map Unit Setting

MLRA: 29
 Landscape: Hills
 Elevation: 4,500 to 6,800
 Precipitation: 4 to 8 inches
 Air temperature: 50 to 55 degrees Fahrenheit
 Frost-free period: 120 to 150 days

Composition

Tokoper very cobbly sandy loam, 8 to 15 percent slopes--35 percent
 Downeyville very gravelly fine sandy loam, 8 to 30 percent slopes--30 percent
 Pintwater very gravelly fine sandy loam, 15 to 50 percent slopes--20 percent
 Rock outcrop--10 percent
 Izo very gravelly sand, 2 to 4 percent slopes--5 percent

Component Description

Tokoper and similar soils

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Galleta, spiny horsebrush, desert needlegrass, black greasewood, Indian ricegrass, spiny menodora, shadscale, Nevada ephedra, wolfberry

Typical profile:

Surface rock fragments: About 5 percent stones, 15 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; very cobbly sandy loam
 Layer 2--3 to 9 inches; very gravelly clay loam
 Layer 3--9 to 14 inches; extremely gravelly loam
 Layer 4--14 to 15 inches; indurated
 Layer 5--15 to 25 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Bedrock (lithic): 8 to 15 inches
 Permeability class (root zone): Moderately slow
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description**Downeyville and similar soils**

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass, spiny menodora, galleta, dalea, bud sagebrush, shadscale, winterfat, Nevada ephedra

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 4 inches; very gravelly fine sandy loam
 Layer 2--4 to 9 inches; very gravelly loam
 Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 30 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches
 Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description**Pintwater and similar soils**

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Dalea, Nevada ephedra, winterfat, galleta, spiny menodora, shadscale, black greasewood, bottlebrush squirreltail, desert needlegrass, Indian ricegrass, bud sagebrush

Typical profile:

Surface rock fragments: About 5 percent stones, 5 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; very gravelly fine sandy loam
 Layer 2--3 to 11 inches; extremely gravelly sandy loam
 Layer 3--11 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 10 to 20 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.9 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Rock outcrop**

Composition: 0 to 10 percent
 Landform: Hills
 Ecological site: None assigned

Izo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Spiny hopsage, Nevada ephedra, Indian ricegrass, Cooper wolfberry, littleleaf horsebrush, rubber rabbitbrush, fourwing saltbush, burrobrush

Ecological site: 029XY041NV--Dry Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2252--Tokoper-Blacktop association

Map Unit Setting

MLRA: 29

Landscape: Hills

Elevation: 4,200 to 6,500

Precipitation: 5 to 8 inches

Air temperature: 51 to 55 degrees Fahrenheit

Frost-free period: 180 to 200 days

Composition

Tokoper very cobbly sandy loam, 8 to 15 percent slopes--55 percent

Blacktop very stony fine sandy loam, 15 to 50 percent slopes--30 percent

Downeyville very gravelly sandy loam, 8 to 15 percent slopes--10 percent

Rock outcrop--5 percent

Component Description

Tokoper and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Galleta, spiny horsebrush, desert needlegrass, black greasewood, Indian ricegrass, spiny menodora, wolfberry, Nevada ephedra, shadscale

Typical profile:

Surface rock fragments: About 5 percent stones, 15 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; very cobbly sandy loam

Layer 2--3 to 9 inches; very gravelly clay loam

Layer 3--9 to 14 inches; extremely gravelly loam

Layer 4--14 to 15 inches; indurated

Layer 5--15 to 25 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Bedrock (lithic): 8 to 15 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Blacktop and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Indian ricegrass, Cooper wolfberry, Nevada dalea, shadscale, bud sagebrush, horsebrush, black greasewood

Typical profile:

Surface rock fragments: About 15 percent stones, 10 percent cobbles, 35 percent gravel

Layer 1--0 to 7 inches; very stony fine sandy loam

Layer 2--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 10 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.4 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7e

Ecological site: 029XY033NV--Sodic Hill 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Downeyville and similar soils**

Composition: 0 to 10 percent

Slope: 8 to 15 percent

Landform: Hills

Typical vegetation: Indian ricegrass, winterfat, shadscale, bud sagebrush, desert needlegrass, bottlebrush squirreltail, black greasewood, spiny menodora, galleta, Nevada ephedra, dalea

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Rock outcrop

Composition: 0 to 5 percent

Landform: Hills

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2253--Tokoper-Ardivey association***Map Unit Setting***

MLRA: 29

Landscape: Hills

Elevation: 4,600 to 6,500

Precipitation: 4 to 8 inches

Air temperature: 51 to 54 degrees Fahrenheit

Frost-free period: 120 to 150 days

Composition

Tokoper very cobbly sandy loam, 4 to 15 percent slopes--60 percent

Ardivey very gravelly sandy loam, 2 to 8 percent slopes--25 percent

Downeyville very gravelly sandy loam, 4 to 8 percent slopes--8 percent

Izo very gravelly sand, 2 to 8 percent slopes--5 percent

Rock outcrop--2 percent

Component Description**Tokoper and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Galleta, shadscale, black greasewood, desert needlegrass, spiny horsebrush, wolfberry, spiny menodora, Nevada ephedra, Indian ricegrass

Typical profile:

Surface rock fragments: About 5 percent stones, 15 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; very cobbly sandy loam

Layer 2--3 to 9 inches; very gravelly clay loam

Layer 3--9 to 14 inches; extremely gravelly loam

Layer 4--14 to 15 inches; indurated

Layer 5--15 to 25 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Bedrock (lithic): 8 to 15 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description**Ardivey and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny menodora, Indian ricegrass, black greasewood, bottlebrush squirreltail, Cooper wolfberry, galleta, winterfat, shadscale, bud sagebrush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 14 inches; very gravelly loam

Layer 3--14 to 60 inches; extremely gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Permeability class (root zone): Moderately slow

Available water capacity: About 3 inches

Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 029XY036NV--Cobbly Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Downeyville and similar soils

Composition: 0 to 8 percent
Slope: 4 to 8 percent
Landform: Hills
Typical vegetation: Bud sagebrush, winterfat, Indian ricegrass, shadscale, bottlebrush squirreltail, galleta
Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Izo and similar soils

Composition: 0 to 5 percent
Slope: 2 to 8 percent
Landform: Inset fans
Typical vegetation: Nevada ephedra, littleleaf horsebrush, Cooper wolfberry, spiny hopsage, burrobrush, fourwing saltbush, Indian ricegrass, rubber rabbitbrush
Ecological site: 029XY041NV--Dry Wash

Rock outcrop

Composition: 0 to 2 percent
Landform: Hills
Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

2254--Tokoper-Downeyville-Espint association

Map Unit Setting

MLRA: 29
Landscape: Hills
Elevation: 5,500 to 6,500
Precipitation: 5 to 10 inches
Air temperature: 51 to 55 degrees Fahrenheit
Frost-free period: 120 to 150 days

Composition

Tokoper very cobbly sandy loam, 15 to 30 percent slopes--35 percent
Downeyville very gravelly fine sandy loam, 8 to 15 percent slopes--30 percent
Espint very gravelly fine sandy loam, 15 to 50 percent slopes--25 percent
Stewval very stony fine sandy loam, 15 to 50 percent slopes--10 percent

Component Description

Tokoper and similar soils

Landform: Hills
Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Desert needlegrass, black greasewood, spiny horsebrush, Indian ricegrass, spiny menodora, wolfberry, galleta, Nevada ephedra, shadscale

Typical profile:

Surface rock fragments: About 5 percent stones, 15 percent cobbles, 60 percent gravel
Layer 1--0 to 3 inches; very cobbly sandy loam
Layer 2--3 to 9 inches; very gravelly clay loam
Layer 3--9 to 14 inches; extremely gravelly loam
Layer 4--14 to 15 inches; indurated
Layer 5--15 to 25 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent
Runoff: Very high
Depth to restrictive feature: Duripan: 8 to 14 inches
Bedrock (lithic): 8 to 15 inches
Permeability class (root zone): Moderately slow
Available water capacity: About 2 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Downeyville and similar soils

Landform: Hills
Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Galleta, winterfat, Nevada ephedra, dalea, shadscale, Indian ricegrass, spiny menodora, desert needlegrass, bottlebrush squirreltail, black greasewood, bud sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 4 inches; very gravelly fine sandy loam
 Layer 2--4 to 9 inches; very gravelly loam
 Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.7 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Espint and similar soils

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Winterfat, Indian ricegrass, desert needlegrass, spiny hopsage, Nevada ephedra, Douglas rabbitbrush, Wyoming big sagebrush, galleta

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel
 Layer 1--0 to 1 inches; very gravelly fine sandy loam
 Layer 2--1 to 7 inches; gravelly clay
 Layer 3--7 to 17 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high

Depth to restrictive feature: Bedrock (paralithic): 6 to 14 inches

Permeability class (root zone): Slow

Available water capacity: About 1.0 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Stewval and similar soils

Composition: 0 to 10 percent

Slope: 15 to 50 percent

Landform: Hills

Typical vegetation: Winterfat, needlegrass, bluegrass, Nevada ephedra, galleta, Indian ricegrass, black sagebrush

Ecological site: 029XY014NV--Shallow Calcareous Slope 8-12 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2260--Greyeagle very gravelly sandy loam, 2 to 8 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,000 to 4,000

Precipitation: 5 to 7 inches

Air temperature: 59 to 65 degrees Fahrenheit

Frost-free period: 235 to 260 days

Composition

Greyeagle very gravelly sandy loam, 2 to 8 percent slopes--85 percent

Dedas very gravelly sandy loam, 4 to 8 percent slopes--8 percent

Strozi gravelly fine sandy loam, 2 to 8 percent slopes--5 percent

Sanwell gravelly fine sandy loam, 4 to 8 percent slopes--2 percent

Component Description**Greyeagle and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, shadscale, Nevada ephedra, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 6 inches; gravelly sandy loam

Layer 3--6 to 8 inches; very gravelly sandy loam

Layer 4--8 to 24 inches; indurated

Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.6 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Dedas and similar soils**

Composition: 0 to 8 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, creosotebush, Nevada ephedra, white bursage, blackbrush

Ecological site: 030XA094NV--Shallow Gravelly Loam 8-12 P.Z.

Strozi and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Shadscale, range ratany, desert needlegrass, Indian ricegrass, white bursage, creosotebush

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Sanwell and similar soils

Composition: 0 to 2 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: White bursage, shadscale, range ratany, creosotebush, Indian ricegrass, desert needlegrass

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2261--Longjim-Yermo-Dedas association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,500 to 4,200

Precipitation: 4 to 9 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 190 to 230 days

Composition

Longjim gravelly fine sandy loam, 8 to 15 percent slopes--40 percent

Yermo very gravelly sandy loam, 2 to 15 percent slopes--25 percent

Dedas very gravelly sandy loam, 4 to 15 percent slopes--20 percent

Arizo very gravelly loamy sand, 4 to 15 percent slopes--8 percent

Zibate very gravelly sandy loam, 8 to 15 percent slopes--7 percent

Component Description**Longjim and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, blackbrush, Nevada ephedra, creosotebush, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel

Layer 1--0 to 3 inches; gravelly fine sandy loam

Layer 2--3 to 8 inches; gravelly loam

Layer 3--8 to 16 inches; very gravelly sandy loam

Layer 4--16 to 20 inches; indurated

Layer 5--20 to 45 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 14 to 20 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA094NV--Shallow Gravelly Loam 8-12 P.Z.

Component Description**Yermo and similar soils**

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, desert needlegrass, creosotebush, white bursage, range ratany

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description**Dedas and similar soils**

Landform: Rock pediments

Parent material: Residuum weathered from tuff

Typical vegetation: Indian ricegrass, white bursage, blackbrush, Nevada ephedra, creosotebush

Typical profile:

Surface rock fragments: About 1 percent stones, 20 percent cobbles, 40 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 15 inches; very gravelly sandy loam

Layer 3--15 to 17 inches; indurated

Layer 4--17 to 27 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 14 to 20 inches

Bedrock (lithic): 16 to 24 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA094NV--Shallow Gravelly Loam 8-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Arizo and similar soils**

Composition: 0 to 8 percent

Slope: 4 to 15 percent

Landform: Drainageways

Typical vegetation: White bursage, cattle saltbush, white burrobrush, creosotebush, Indian ricegrass, bladdersage, desert needlegrass

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Zibate and similar soils

Composition: 0 to 7 percent

Slope: 8 to 15 percent
 Landform: Hills
 Typical vegetation: Indian ricegrass, blackbrush,
 desert needlegrass
 Ecological site: 030XA095NV--Shallow Gravelly Slope
 8-12 P.Z.

Management

For information about managing this map unit, see
 the following sections and associated tables in Part II
 of this publication:
 "Range" section
 "Engineering" and "Soil Properties" sections

2263--Greyeagle-Sanwell-Yermo association

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,400 to 4,000
 Precipitation: 3 to 6 inches
 Air temperature: 59 to 63 degrees Fahrenheit
 Frost-free period: 210 to 240 days

Composition

Greyeagle very gravelly sandy loam, 4 to 15 percent
 slopes--65 percent
 Sanwell gravelly fine sandy loam, 2 to 8 percent
 slopes--15 percent
 Yermo very gravelly sandy loam, 2 to 8 percent
 slopes--15 percent
 Arizo very gravelly loamy sand, 2 to 8 percent slopes-
 -5 percent

Component Description

Greyeagle and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock
 sources
 Typical vegetation: Indian ricegrass, shadscale, desert
 needlegrass, creosotebush, Nevada ephedra, white
 bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones,
 about 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 6 inches; gravelly sandy loam
 Layer 3--6 to 8 inches; very gravelly sandy loam
 Layer 4--8 to 24 inches; indurated

Layer 5--24 to 60 inches; stratified extremely cobbly
 loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 4 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.6 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA066NV--Calcareous Loam 5-8
 P.Z.

Component Description

Sanwell and similar soils

Landform: Alluvial flats
 Parent material: Lacustrine deposits
 Typical vegetation: Range ratany, shadscale, white
 bursage, Indian ricegrass, creosotebush, desert
 needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50
 percent gravel
 Layer 1--0 to 9 inches; gravelly fine sandy loam
 Layer 2--9 to 16 inches; gravelly fine sandy loam
 Layer 3--16 to 31 inches; very gravelly coarse sandy
 loam
 Layer 4--31 to 60 inches; very gravelly coarse sandy
 loam

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Medium
 Permeability class (root zone): Moderate
 Sodicty: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, range ratany, creosotebush, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Arizo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: White bursage, cattle saltbush, white burrobrush, creosotebush, Indian ricegrass

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2266--Greyeagle very gravelly sandy loam, 15 to 50 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,000 to 4,000

Precipitation: 5 to 7 inches

Air temperature: 60 to 65 degrees Fahrenheit

Frost-free period: 235 to 260 days

Composition

Greyeagle very gravelly sandy loam, 15 to 50 percent slopes--95 percent

Sanwell gravelly fine sandy loam, 2 to 8 percent slopes--5 percent

Component Description

Greyeagle and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, desert needlegrass, shadscale, white bursage, creosotebush, Nevada ephedra

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 6 inches; gravelly sandy loam

Layer 3--6 to 8 inches; very gravelly sandy loam

Layer 4--8 to 24 inches; indurated

Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.6 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Sanwell and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Creosotebush, wolfberry, Indian ricegrass, desert needlegrass, white bursage, shadscale

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2267--Greyeagle-Skelon association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,500 to 4,000

Precipitation: 3 to 8 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 210 to 250 days

Composition

Greyeagle very gravelly sandy loam, 2 to 4 percent slopes--75 percent

Skelon very gravelly sandy loam, 2 to 4 percent slopes--20 percent

Sanwell gravelly fine sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Greyeagle and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, shadscale, Nevada ephedra, spiny hopsage, winterfat, desert needlegrass, white bursage, spiny menodora, fourwing saltbush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 6 inches; gravelly sandy loam

Layer 3--6 to 8 inches; very gravelly sandy loam

Layer 4--8 to 24 inches; indurated

Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.6 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Skelon and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, Nevada ephedra, spiny hopsage, winterfat, spiny menodora, fourwing saltbush, white bursage, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam

Layer 3--28 to 44 inches; indurated

Layer 4--44 to 52 inches; very gravelly sandy loam

Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: High

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Sanwell and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 4 percent
 Landform: Fan remnants
 Typical vegetation: Desert needlegrass, shadscale, Anderson wolfberry, creosotebush, Nevada ephedra, bud sagebrush
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2268--Greyeagle-Arizo association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,500 to 4,000
 Precipitation: 4 to 7 inches
 Air temperature: 60 to 65 degrees Fahrenheit
 Frost-free period: 230 to 260 days

Composition

Greyeagle very gravelly sandy loam, 4 to 8 percent slopes--70 percent
 Arizo very gravelly loamy sand, 2 to 8 percent slopes--25 percent
 Arizo very gravelly loamy sand, 2 to 8 percent slopes--5 percent

Component Description

Greyeagle and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Nevada ephedra, shadscale, desert needlegrass, Indian ricegrass, creosotebush, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 6 inches; gravelly sandy loam
 Layer 3--6 to 8 inches; very gravelly sandy loam
 Layer 4--8 to 24 inches; indurated
 Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.6 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Component Description

Arizo and similar soils

Landform: Drainageways
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Creosotebush, white burrobrush, cattle saltbush, white bursage, Indian ricegrass, bladdersage, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel
 Layer 1--0 to 8 inches; very gravelly loamy sand
 Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very low
 Permeability class (root zone): Rapid
 Available water capacity: About 3 inches
 Present flooding: Occasional
 Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w
 Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Arizo and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 8 percent
 Landform: Inset fans
 Typical vegetation: Indian ricegrass, creosotebush, white burrobush, cattle saltbush, white bursage
 Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Engineering" and "Soil Properties" sections

2269--Greyeagle-Yermo-Strozi association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,300 to 4,000
 Precipitation: 4 to 9 inches
 Air temperature: 57 to 64 degrees Fahrenheit
 Frost-free period: 210 to 250 days

Composition

Greyeagle very gravelly sandy loam, 2 to 4 percent slopes--45 percent
 Yermo very gravelly sandy loam, 0 to 4 percent slopes--30 percent
 Strozi gravelly fine sandy loam, 2 to 4 percent slopes--20 percent
 Arizo very gravelly loamy sand, 2 to 4 percent slopes--5 percent

Component Description

Greyeagle and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Desert needlegrass, Indian ricegrass, spiny menodora, white bursage, fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage, winterfat

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 6 inches; gravelly sandy loam
 Layer 3--6 to 8 inches; very gravelly sandy loam
 Layer 4--8 to 24 inches; indurated
 Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.6 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Shadscale, bud sagebrush, Anderson wolfberry, Nevada ephedra, creosotebush, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 6 inches; very gravelly sandy loam
 Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
Runoff: Very low
Permeability class (root zone): Moderately rapid
Available water capacity: About 4 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description

Strozi and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Shadscale, Nevada ephedra, winterfat, spiny menodora, white bursage, spiny hopsage, fourwing saltbush, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: About 1 percent cobbles, 50 percent gravel
Layer 1--0 to 5 inches; gravelly fine sandy loam
Layer 2--5 to 13 inches; clay loam
Layer 3--13 to 32 inches; very gravelly sandy loam
Layer 4--32 to 33 inches; cemented
Layer 5--33 to 60 inches; very gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
Runoff: Medium
Depth to restrictive feature: Duripan: 20 to 40 inches
Permeability class (root zone): Moderately slow
Salinity: Saline within 40 inches
Available water capacity: About 3 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Arizo and similar soils

Composition: 0 to 5 percent
Slope: 2 to 4 percent
Landform: Summits of fan remnants
Typical vegetation: Spiny menodora, winterfat, spiny hopsage, fourwing saltbush, shadscale, Nevada ephedra, Indian ricegrass, white bursage, desert needlegrass
Ecological site: 030XA051NV--Cobbly Loam 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

2270--Bluepoint loamy fine sand, warm, 4 to 30 percent slopes

Map Unit Setting

MLRA: 30
Landscape: Fan piedmont
Elevation: 2,500 to 3,500
Precipitation: 3 to 7 inches
Air temperature: 55 to 66 degrees Fahrenheit
Frost-free period: 200 to 240 days

Composition

Bluepoint loamy fine sand, 4 to 30 percent slopes--85 percent
Arizo very gravelly loamy sand, 0 to 4 percent slopes--10 percent
Greyeagle very gravelly sandy loam, 0 to 4 percent slopes--5 percent

Component Description

Bluepoint and similar soils

Landform: Sand sheets
Parent material: Eolian sands
Typical vegetation: Desert needlegrass, sand dropseed, Indian ricegrass, creosotebush, fourwing saltbush, white bursage, winterfat

Typical profile:

Layer 1--0 to 9 inches; loamy fine sand

Layer 2--9 to 24 inches; stratified fine sand to gravelly loamy fine sand
 Layer 3--24 to 41 inches; fine sand
 Layer 4--41 to 60 inches; stratified sand to very fine sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 30 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA069NV--Limy Sand 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Arizo and similar soils

Composition: 0 to 10 percent
 Slope: 0 to 4 percent
 Landform: Drainageways
 Typical vegetation: White bursage, cattle saltbush, white burrobrush, creosotebush, Indian ricegrass
 Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Greyeagle and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 4 percent
 Landform: Fan remnants
 Typical vegetation: Indian ricegrass, desert needlegrass, creosotebush, white bursage, white burrobrush, desert alysum
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2271--Kawich-Corbilt-Wanomie complex, 0 to 2 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Bolson
 Elevation: 4,000 to 5,800
 Precipitation: 3 to 8 inches
 Air temperature: 55 to 63 degrees Fahrenheit
 Frost-free period: 140 to 220 days

Composition

Kawich fine sand, 0 to 2 percent slopes--40 percent
 Corbilt gravelly fine sandy loam, 0 to 2 percent slopes--25 percent
 Wanomie sandy loam, 0 to 2 percent slopes--20 percent
 Cobatus loam, 0 to 2 percent slopes--10 percent
 Playas silty clay loam--5 percent

Component Description

Kawich and similar soils

Landform: Dunes
 Parent material: Eolian sands
 Typical vegetation: Horsebrush, needleandthread, black greasewood, Indian ricegrass, fourwing saltbush

Typical profile:

Layer 1--0 to 2 inches; fine sand
 Layer 2--2 to 60 inches; fine sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Negligible
 Permeability class (root zone): Very rapid
 Salinity: Saline within 40 inches
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 027XY016NV--Sodic Dunes

Component Description

Corbilt and similar soils

Landform: Fan skirts

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, shadscale, white burrobrush, wolfberry, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel
 Layer 1--0 to 4 inches; gravelly fine sandy loam
 Layer 2--4 to 32 inches; gravelly fine sandy loam
 Layer 3--32 to 56 inches; very gravelly sandy loam
 Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Very low
 Depth to restrictive feature: Duripan: 40 to 60 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 6 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c
 Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Component Description

Wanomie and similar soils

Landform: Alluvial flats
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Wolfberry, desert needlegrass, Indian ricegrass, white burrobrush, shadscale

Typical profile:

Surface rock fragments: About 10 percent gravel
 Layer 1--0 to 2 inches; sandy loam
 Layer 2--2 to 30 inches; stratified coarse sandy loam to loam
 Layer 3--30 to 31 inches; cemented
 Layer 4--31 to 60 inches; coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: High

Depth to restrictive feature: Duripan: 20 to 40 inches
 Permeability class (root zone): Moderate
 Salinity: Saline within 40 inches
 Sodicity: Sodic within 40 inches
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Cobatus and similar soils

Composition: 0 to 10 percent
 Slope: 0 to 2 percent
 Landform: Lake plains
 Typical vegetation: Bottlebrush squirreltail, bud sagebrush, shadscale, black greasewood, Indian ricegrass
 Ecological site: 029XY024NV--Sodic Terrace 5-8 P.Z.

Playas

Composition: 0 to 5 percent
 Landform: Playas
 Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2280--Shorim-Zalda-Upspring association

Map Unit Setting

MLRA: 30
 Landscape: Hills
 Elevation: 3,400 to 4,200
 Precipitation: 3 to 6 inches
 Air temperature: 61 to 64 degrees Fahrenheit
 Frost-free period: 210 to 240 days

Composition

Shorim very gravelly sandy loam, 2 to 15 percent slopes--60 percent

Zalda gravelly sandy loam, 15 to 30 percent slopes--15 percent
 Upspring very gravelly sandy loam, 15 to 30 percent slopes--15 percent
 Rock outcrop--5 percent
 Cinder land, 8 to 30 percent slopes--5 percent

Component Description

Shorim and similar soils

Landform: Hills
 Parent material: Residuum weathered from volcanic rocks
 Typical vegetation: Shadscale, Indian ricegrass, Fremont dalea, desertholly

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 70 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 10 inches; gravelly sandy loam
 Layer 3--10 to 21 inches; very gravelly sandy loam
 Layer 4--21 to 24 inches; indurated
 Layer 5--24 to 28 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 20 to 38 inches
 Bedrock (lithic): 21 to 40 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 1.3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Component Description

Zalda and similar soils

Landform: Hills
 Parent material: Residuum weathered from volcanic rocks
 Typical vegetation: Shadscale, creosotebush, Indian ricegrass, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 55 percent gravel
 Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 7 inches; loam
 Layer 3--7 to 8 inches; indurated
 Layer 4--8 to 18 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 7 to 14 inches
 Bedrock (lithic): 8 to 20 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.8 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA056NV--Loamy Hill 3-5 P.Z.

Component Description

Upspring and similar soils

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Desert needlegrass, white bursage, shadscale, ephedra, winterfat, creosotebush, spiny menodora, Indian ricegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 2 inches; very gravelly sandy loam
 Layer 2--2 to 12 inches; very gravelly fine sandy loam
 Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.8 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA068NV--Calcareous Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Rock outcrop

Composition: 0 to 5 percent

Landform: Hills

Ecological site: None assigned

Cinder Land

Composition: 0 to 5 percent

Slope: 8 to 30 percent

Landform: Cinder cones

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2281--Shorim-Yermo association

Map Unit Setting

MLRA: 30

Landscape: Hills

Elevation: 3,400 to 4,200

Precipitation: 3 to 6 inches

Air temperature: 61 to 64 degrees Fahrenheit

Frost-free period: 210 to 230 days

Composition

Shorim very gravelly sandy loam, 8 to 15 percent slopes--80 percent

Yermo very gravelly sandy loam, 2 to 8 percent slopes--15 percent

Greyeagle very gravelly sandy loam, 8 to 15 percent slopes--5 percent

Component Description

Shorim and similar soils

Landform: Hills

Parent material: Residuum weathered from volcanic rocks

Typical vegetation: Desertholly, Fremont dalea, Indian ricegrass, shadscale

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 70 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 10 inches; gravelly sandy loam

Layer 3--10 to 21 inches; very gravelly sandy loam

Layer 4--21 to 24 inches; indurated

Layer 5--24 to 28 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: High

Depth to restrictive feature: Duripan: 20 to 38 inches

Bedrock (lithic): 21 to 40 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 1.3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Range ratany, desert needlegrass, white bursage, Indian ricegrass, creosotebush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Greyeagle and similar soils**

Composition: 0 to 5 percent

Slope: 8 to 15 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, white bursage, creosotebush, shadscale, ephedra, desert needlegrass

Ecological site: 030XA059NV--Gravelly Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 15 inches; very gravelly sandy loam

Layer 3--15 to 17 inches; indurated

Layer 4--17 to 27 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 30 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 14 to 20 inches

Bedrock (lithic): 16 to 24 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA094NV--Shallow Gravelly Loam 8-12 P.Z.

2282--Dedas-Orwash association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 4,200 to 4,500

Precipitation: 5 to 9 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 180 to 210 days

Composition

Dedas very gravelly sandy loam, 4 to 30 percent slopes--70 percent

Orwash gravelly sandy loam, 4 to 15 percent slopes--20 percent

Longjim gravelly fine sandy loam, 8 to 15 percent slopes--5 percent

Abruptic Argidurids gravelly sandy loam, 8 to 15 percent slopes--5 percent

Component Description**Dedas and similar soils**

Landform: Rock pediments

Parent material: Residuum weathered from tuff

Typical vegetation: Indian ricegrass, creosotebush, Nevada ephedra, blackbrush, white bursage

Typical profile:

Surface rock fragments: About 1 percent stones, 20 percent cobbles, 40 percent gravel

Component Description**Orwash and similar soils**

Landform: Fan skirts

Parent material: Alluvium derived from granitic rocks

Typical vegetation: Spiny menodora, winterfat, spiny hopsage, Nevada ephedra, shadscale, fourwing saltbush, white bursage, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 18 inches; stratified gravelly coarse sandy loam to very gravelly loamy coarse sand

Layer 3--18 to 60 inches; stratified gravelly coarse sand to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Longjim and similar soils**

Composition: 0 to 5 percent

Slope: 8 to 15 percent

Landform: Fan remnants

Typical vegetation: Blackbrush, Indian ricegrass, desert needlegrass, ephedra

Ecological site: 029XY019NV--Shallow Gravelly Slope 8-10 P.Z.

Abruptic Argidurids and similar soils

Composition: 0 to 5 percent

Classification: Clayey-skeletal, smectitic, thermic

Abruptic Argidurids

Slope: 8 to 15 percent

Landform: Fan remnants

Typical vegetation: Desert needlegrass, ephedra, Indian ricegrass, blackbrush

Ecological site: 029XY019NV--Shallow Gravelly Slope 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2290--Gabbvally-Upspring-Rubble land association***Map Unit Setting***

MLRA: 29

Landscape: Hills

Elevation: 4,200 to 5,200

Precipitation: 4 to 10 inches

Air temperature: 50 to 59 degrees Fahrenheit

Frost-free period: 120 to 240 days

Composition

Gabbvally very gravelly sandy loam, 15 to 50 percent slopes--40 percent

Upspring very gravelly sandy loam, 30 to 75 percent slopes--35 percent

Rubble land fragmental material, 30 to 75 percent slopes--15 percent

Espint very gravelly fine sandy loam, 30 to 75 percent slopes--10 percent

Component Description**Gabbvally and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Bottlebrush squirreltail, galleta, desert needlegrass, Wyoming big sagebrush, other perennial forbs, Indian ricegrass, spiny hopsage, winterfat, Nevada ephedra, Douglas rabbitbrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 12 inches; very gravelly loam

Layer 3--12 to 16 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description**Upspring and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Creosotebush, winterfat, ephedra, shadscale, white bursage, spiny menodora, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam

Layer 2--2 to 12 inches; very gravelly sandy loam

Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.8 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA068NV--Calcareous Hill 5-8 P.Z.

Component Description

Rubble land

Landform: Hills

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Low

Depth to restrictive feature: Bedrock (lithic): 40 to 60 inches

Interpretive Groups

Nonirrigated land capability: 8s

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Espint and similar soils

Composition: 0 to 10 percent

Slope: 30 to 75 percent

Landform: Hills

Typical vegetation: Indian ricegrass, desert needlegrass, Wyoming big sagebrush, Douglas rabbitbrush, spiny hopsage, winterfat, Nevada ephedra, galleta

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2291--Gabbvally-Rock outcrop association

Map Unit Setting

MLRA: 29

Landscape: Hills

Elevation: 6,100 to 6,600

Precipitation: 8 to 10 inches

Air temperature: 50 to 54 degrees Fahrenheit

Frost-free period: 100 to 130 days

Composition

Gabbvally very gravelly sandy loam, 15 to 50 percent slopes--70 percent

Rock outcrop--15 percent

Longjim gravelly fine sandy loam, 15 to 50 percent slopes--10 percent

Espint very gravelly fine sandy loam, 15 to 50 percent slopes--5 percent

Component Description

Gabbvally and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Galleta, desert needlegrass, bottlebrush squirreltail, other perennial forbs, Indian ricegrass, spiny hopsage, winterfat, Nevada ephedra, Douglas rabbitbrush, Wyoming big sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 12 inches; very gravelly loam

Layer 3--12 to 16 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description

Rock outcrop
Landform: Hills

Component Properties and Qualities

Slope: 15 to 50

Interpretive Groups

Nonirrigated land capability: Not determined
Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Longjim and similar soils

Composition: 0 to 10 percent
Slope: 15 to 50 percent
Landform: Ballenas
Typical vegetation: Blackbrush, Indian ricegrass, desert needlegrass, ephedra
Ecological site: 029XY019NV--Shallow Gravelly Slope 8-10 P.Z.

Espint and similar soils

Composition: 0 to 5 percent
Slope: 15 to 50 percent
Landform: Hills
Typical vegetation: Spiny hopsage, desert needlegrass, Wyoming big sagebrush, Douglas rabbitbrush, Nevada ephedra, Indian ricegrass, winterfat, galleta
Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
"Range" section
"Engineering" and "Soil Properties" sections

2301--Tecopa-Haleburu-Rock outcrop complex, 2 to 50 percent slopes

Map Unit Setting

MLRA: 30
Landscape: Hills
Elevation: 2,200 to 3,800
Precipitation: 4 to 8 inches
Air temperature: 61 to 65 degrees Fahrenheit

Frost-free period: 200 to 250 days

Composition

Tecopa extremely gravelly sandy loam, 15 to 50 percent slopes--50 percent
Haleburu extremely gravelly sandy loam, 15 to 50 percent slopes--20 percent
Rock outcrop, 2 to 50 percent slopes--15 percent
Rubble land fragmental material, 30 to 75 percent slopes--8 percent
Tecopa extremely gravelly sandy loam, 8 to 15 percent slopes--7 percent

Component Description

Tecopa and similar soils

Landform: Hills
Parent material: Colluvium derived from mixed rocks over residuum weathered from mixed rocks
Typical vegetation: Desert needlegrass, other perennial grasses, other perennial forbs, creosotebush, big galleta, white bursage, Indian ricegrass, shadscale, other annual forbs, other annual grasses, Nevada ephedra

Typical profile:

Surface rock fragments: About 3 percent stones, 10 percent cobbles, 55 percent gravel
Layer 1--0 to 1 inches; extremely gravelly sandy loam
Layer 2--1 to 7 inches; very gravelly sandy loam
Layer 3--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
Runoff: Very high
Depth to restrictive feature: Bedrock (lithic): 2 to 10 inches
Permeability class (root zone): Moderate
Available water capacity: About 0.3 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XB002NV--Loamy Hill 5-8 P.Z.

Component Description

Haleburu and similar soils

Landform: Hills
Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Creosotebush, white bursage, King desertgrass, big galleta, range ratany

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 65 percent gravel
 Layer 1--0 to 2 inches; extremely gravelly sandy loam
 Layer 2--2 to 11 inches; very gravelly sandy loam
 Layer 3--11 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.6 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB001NV--Limy Hill 5-7 P.Z.

Component Description

Rock outcrop

Landform: Hills

Component Properties and Qualities

Slope: 2 to 50 percent

Interpretive Groups

Nonirrigated land capability: Not determined
 Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Rubble land

Composition: 0 to 8 percent
 Slope: 30 to 75 percent
 Landform: Hills
 Ecological site: None assigned

Tecopa dry and similar soils

Composition: 0 to 7 percent
 Slope: 8 to 15 percent
 Landform: Hills

Typical vegetation: White burrobrush, ephedra, shadscale, desert needlegrass, Indian ricegrass, creosotebush, white bursage
 Ecological site: 030XA067NV--Limy Hill 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2302--Tecopa-Rock outcrop-Upspring complex, 4 to 50 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Hills
 Elevation: 2,300 to 4,000
 Precipitation: 4 to 6 inches
 Air temperature: 59 to 65 degrees Fahrenheit
 Frost-free period: 230 to 260 days

Composition

Tecopa extremely gravelly sandy loam, 15 to 50 percent slopes--35 percent
 Rock outcrop--30 percent
 Upspring very gravelly sandy loam, 4 to 30 percent slopes--25 percent
 Gabbvally very stony loam, 15 to 30 percent slopes--10 percent

Component Description

Tecopa and similar soils

Landform: Hills
 Parent material: Colluvium derived from mixed rocks over residuum weathered from mixed rocks
 Typical vegetation: Desert needlegrass, other perennial grasses, other perennial forbs, Indian ricegrass, creosotebush, Nevada ephedra, shadscale, white bursage, other annual grasses, other annual forbs

Typical profile:

Surface rock fragments: About 3 percent stones, 10 percent cobbles, 55 percent gravel
 Layer 1--0 to 1 inches; extremely gravelly sandy loam
 Layer 2--1 to 7 inches; very gravelly sandy loam
 Layer 3--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 2 to 10 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA059NV--Gravelly Hill 5-8 P.Z.

Component Description**Rock outcrop**

Landform: Hills

Component Properties and Qualities

Slope: 4 to 50

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Component Description**Upspring and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Spiny menodora, white bursage, desert needlegrass, Indian ricegrass, creosotebush, winterfat, ephedra, shadscale

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam

Layer 2--2 to 12 inches; very gravelly fine sandy loam

Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 30 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.6 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA068NV--Calcareous Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Gabbvally and similar soils**

Composition: 0 to 10 percent

Slope: 15 to 30 percent

Landform: Hills

Typical vegetation: Wyoming big sagebrush, desert needlegrass, Indian ricegrass, bottlebrush squirreltail, Douglas rabbitbrush, Nevada ephedra, spiny hopsage, winterfat, galleta, other perennial forbs

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2304--Tecopa-Zibate-Rock outcrop association***Map Unit Setting***

MLRA: 30

Landscape: Hills

Elevation: 3,300 to 4,700

Precipitation: 6 to 10 inches

Air temperature: 57 to 65 degrees Fahrenheit

Frost-free period: 180 to 250 days

Composition

Tecopa extremely gravelly sandy loam, 15 to 50 percent slopes--50 percent

Zibate extremely gravelly sandy loam, 15 to 50 percent slopes--25 percent

Rock outcrop--15 percent

Haleburu extremely gravelly sandy loam, 15 to 50 percent slopes--8 percent

Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--2 percent

Component Description**Tecopa and similar soils**

Landform: Hills

Parent material: Colluvium derived from mixed rocks over residuum weathered from mixed rocks

Typical vegetation: White bursage, creosotebush

Typical profile:

Surface rock fragments: About 3 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 1 inches; extremely gravelly sandy loam

Layer 2--1 to 7 inches; very gravelly sandy loam

Layer 3--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 2 to 10 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB001NV--Limy Hill 5-7 P.Z.

Component Description

Zibate and similar soils

Landform: Hills

Parent material: Residuum weathered from volcanic rocks

Typical vegetation: Desert needlegrass, Nevada ephedra, blackbrush, big galleta, creosotebush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 45 percent gravel

Layer 1--0 to 1 inches; extremely gravelly sandy loam

Layer 2--1 to 6 inches; very gravelly sandy loam

Layer 3--6 to 19 inches; extremely gravelly loam

Layer 4--19 to 23 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent, north to east aspects

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 20 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB076NV--Shallow Gravelly Slope 5-7 P.Z.

Component Description

Rock outcrop

Landform: Hills

Component Properties and Qualities

Slope: 15 to 50

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Haleburu and similar soils

Composition: 0 to 8 percent

Slope: 15 to 50 percent, northwest to east aspects

Landform: Foothills of hills

Typical vegetation: White bursage, big galleta, Nevada ephedra

Ecological site: 030XB100NV--Gravelly Claypan 5-7 P.Z.

Niavi and similar soils

Composition: 0 to 2 percent

Slope: 2 to 8 percent

Landform: Stream terraces

Typical vegetation: Range ratany, ephedra, Mojave buckwheat, big galleta, creosotebush, Virgin River encelia, Anderson's wolfberry, white bursage

Ecological site: 030XB134NV--Quartzite Outwash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2305--Tecopa-Rock outcrop association***Map Unit Setting***

MLRA: 30
 Landscape: Hills
 Elevation: 2,800 to 4,000
 Precipitation: 4 to 7 inches
 Air temperature: 59 to 67 degrees Fahrenheit
 Frost-free period: 230 to 260 days

Composition

Tecopa extremely gravelly sandy loam, 15 to 50 percent slopes--70 percent
 Rock outcrop--15 percent
 Tecopa extremely gravelly sandy loam, 15 to 50 percent slopes--9 percent
 Haleburu extremely gravelly sandy loam, 30 to 50 percent slopes--4 percent
 Zibate extremely gravelly sandy loam, 15 to 50 percent slopes--2 percent

Component Description**Tecopa and similar soils**

Landform: Hills
 Parent material: Colluvium derived from mixed rocks over residuum weathered from mixed rocks
 Typical vegetation: Creosotebush, white bursage

Typical profile:

Surface rock fragments: About 3 percent stones, 10 percent cobbles, 55 percent gravel
 Layer 1--0 to 1 inches; extremely gravelly sandy loam
 Layer 2--1 to 7 inches; very gravelly sandy loam
 Layer 3--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 2 to 10 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB001NV--Limy Hill 5-7 P.Z.

Component Description

Rock outcrop
 Landform: Hills

Component Properties and Qualities

Slope: 15 to 50

Interpretive Groups

Nonirrigated land capability: Not determined
 Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Tecopa low elevation and similar soils**

Composition: 0 to 9 percent
 Slope: 15 to 50 percent
 Landform: Hills
 Typical vegetation: White bursage, creosotebush
 Ecological site: 030XB017NV--Limy Hill 3-5 P.Z.

Haleburu cool and similar soils

Composition: 0 to 4 percent
 Slope: 30 to 50 percent, northwest to east aspects
 Landform: Footslopes of hills
 Typical vegetation: Triangle goldeneye, Mojave buckwheat, creosotebush, Nevada ephedra, desert needlegrass, white bursage
 Ecological site: 030XB070NV--Volcanic Hill 5-7 P.Z.

Zibate and similar soils

Composition: 0 to 2 percent
 Slope: 15 to 50 percent, north to east aspects
 Landform: Hills
 Typical vegetation: Creosotebush, desert needlegrass, Nevada ephedra, big galleta, blackbrush
 Ecological site: 030XB076NV--Shallow Gravelly Slope 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2310--Nowoy-Commski association***Map Unit Setting***

MLRA: 30
 Landscape: Intermontane basin

Elevation: 2,000 to 2,400
 Precipitation: 3 to 6 inches
 Air temperature: 62 to 67 degrees Fahrenheit
 Frost-free period: 210 to 230 days

Composition

Nowoy gravelly loamy fine sand, 2 to 8 percent slopes--45 percent
 Commski very gravelly fine sandy loam, 2 to 8 percent slopes--40 percent
 Greyeagle very gravelly sandy loam, 0 to 4 percent slopes--10 percent
 Casaga gravelly loam, 0 to 4 percent slopes--5 percent

Component Description

Nowoy and similar soils

Landform: Alluvial flats
 Parent material: Alluvium derived from mixed rocks over lacustrine deposits
 Typical vegetation: Indian ricegrass, Fremont dalea, seepweed, desertholly

Typical profile:

Surface rock fragments: Less than 1 percent cobbles, about 45 percent gravel
 Layer 1--0 to 3 inches; gravelly loamy fine sand
 Layer 2--3 to 20 inches; very gravelly sandy loam
 Layer 3--20 to 60 inches; clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Medium
 Permeability class (root zone): Moderately slow
 Available water capacity: About 9 inches
 Present flooding: Rare
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Component Description

Commski and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Desert needlegrass, Indian ricegrass, creosotebush, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel
 Layer 1--0 to 5 inches; very gravelly fine sandy loam
 Layer 2--5 to 14 inches; extremely gravelly sandy loam
 Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Medium
 Permeability class (root zone): Moderate
 Available water capacity: About 3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Greyeagle and similar soils

Composition: 0 to 10 percent
 Slope: 0 to 4 percent
 Landform: Fan remnants
 Typical vegetation: Indian ricegrass, desert needlegrass, creosotebush, white bursage, white burrobrush, desert alysum
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Casaga and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 4 percent
 Landform: Alluvial flats
 Typical vegetation: Indian ricegrass, shadscale, creosotebush
 Ecological site: 030XA047NV--Barren Fan 3-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2312--Commski-Tanazza association***Map Unit Setting***

MLRA: 30

Landscape: Intermontane basin

Elevation: 2,500 to 2,600

Precipitation: 3 to 6 inches

Air temperature: 63 to 67 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Commski very gravelly fine sandy loam, 2 to 4 percent slopes--55 percent

Tanazza fine sandy loam, 2 to 8 percent slopes--30 percent

Nopah loam, 2 to 4 percent slopes--6 percent

Woda gravelly sandy loam, 2 to 4 percent slopes--6 percent

Irongold extremely gravelly loam, 2 to 8 percent slopes--3 percent

Component Description**Commski and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White bursage, creosotebush, Indian ricegrass, desert needlegrass, range ratany

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam

Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description**Tanazza and similar soils**

Landform: Lake terraces

Parent material: Lacustrine deposits

Typical vegetation: Big galleta, white burrobrush, creosotebush, Indian ricegrass, white bursage

Typical profile:

Surface rock fragments: About 30 percent gravel, 1 percent cobbles

Layer 1--0 to 2 inches; fine sandy loam

Layer 2--2 to 15 inches; silt loam

Layer 3--15 to 45 inches; silty clay loam

Layer 4--45 to 60 inches; gypsiferous material

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Permeability class (root zone): Slow

Available water capacity: About 8 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c

Ecological site: 030XB038NV--Gravelly Gypsic Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Nopah and similar soils**

Composition: 0 to 6 percent

Slope: 2 to 4 percent

Landform: Alluvial flats

Typical vegetation: White burrobrush, big galleta, creosotebush, white bursage, Indian ricegrass

Ecological site: 030XB038NV--Gravelly Gypsic Loam 5-8 P.Z.

Woda and similar soils

Composition: 0 to 6 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: White bursage, Torrey ephedra, range ratany, desertholly

Ecological site: 030XB038NV--Gravelly Pediment 3-5 P.Z.

Irongold and similar soils

Composition: 0 to 3 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Desert needlegrass, big galleta, Indian ricegrass, black grama, Nevada ephedra, blackbrush

Ecological site: 030XB014NV--Shallow Gravelly Loam 7-9 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2320--Wahguyhe-Rock outcrop-Gabbvally association***Map Unit Setting***

MLRA: 29

Landscape: Mountains

Elevation: 5,600 to 6,800

Precipitation: 8 to 10 inches

Air temperature: 50 to 54 degrees Fahrenheit

Frost-free period: 120 to 140 days

Composition

Wahguyhe very gravelly sandy loam, 15 to 50 percent slopes--40 percent

Rock outcrop--30 percent

Gabbvally very gravelly sandy loam, 15 to 50 percent slopes--20 percent

Downeyville very gravelly sandy loam, 15 to 50 percent slopes--10 percent

Component Description**Wahguyhe and similar soils**

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Fourwing saltbush, winterfat, desert needlegrass, Indian ricegrass, galleta, Nevada ephedra, bud sagebrush, Wyoming big sagebrush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam

Layer 2--2 to 16 inches; very gravelly sandy loam

Layer 3--16 to 20 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 14 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 1.1 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7e

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description**Rock outcrop**

Landform: Mountains

Component Properties and Qualities

Slope: 15 to 50

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Component Description**Gabbvally and similar soils**

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Galleta, Wyoming big sagebrush, Douglas rabbitbrush, Nevada ephedra, winterfat, Indian ricegrass, spiny hopsage, other perennial forbs, bottlebrush squirreltail, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 12 inches; very gravelly loam

Layer 3--12 to 16 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Downeyville and similar soils

Composition: 0 to 10 percent

Slope: 15 to 50 percent

Landform: Mountains

Typical vegetation: Galleta, spiny menodora, Indian ricegrass, black greasewood, desert needlegrass, bottlebrush squirreltail, winterfat, bud sagebrush, shadscale, dalea, Nevada ephedra

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2341--Naye gravelly fine sandy loam, 4 to 8 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,700 to 3,300

Precipitation: 4 to 7 inches

Air temperature: 61 to 66 degrees Fahrenheit

Frost-free period: 240 to 260 days

Composition

Naye gravelly fine sandy loam, 4 to 8 percent slopes--85 percent

Woda gravelly sandy loam, 2 to 4 percent slopes--5 percent

Arizo very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Jonnic gravelly loam, 4 to 8 percent slopes--5 percent

Component Description

Naye and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: White burrobrush, big galleta, creosotebush, Indian ricegrass, shadscale, white bursage, ephedra, range ratany, dalea

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 7 inches; gravelly fine sandy loam

Layer 2--7 to 25 inches; very gravelly fine sandy loam

Layer 3--25 to 39 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent

Runoff: High

Depth to restrictive feature: Petrocalcic: 20 to 40 inches

Permeability class (root zone): Moderate

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB009NV--Limy 8-10 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Woda and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Alkali sacaton, fourwing saltbush, honey mesquite, shadscale

Ecological site: 030XY009NV--Silt Bottom 5-8 P.Z.

Arizo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Hollyleaf bursage, desertwillow, big galleta, white burrobrush, creosotebush, white bursage

Ecological site: 030XB028NV--Valley Wash

Jonnic and similar soils

Composition: 0 to 5 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: Blackbrush, bush muhly, yucca, Indian ricegrass, pale wolfberry, creosotebush, big galleta, Nevada ephedra, black grama, fourwing saltbush

Ecological site: 030XB014NV--Shallow Gravelly Loam 7-9 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2372--Zalda-Bluepoint-Rock outcrop association

Map Unit Setting

MLRA: 30

Landscape: Hills

Elevation: 3,400 to 3,900

Precipitation: 3 to 7 inches

Air temperature: 61 to 64 degrees Fahrenheit

Frost-free period: 200 to 240 days

Composition

Zalda gravelly sandy loam, 15 to 30 percent slopes--35 percent

Bluepoint loamy fine sand, 2 to 15 percent slopes--35 percent

Rock outcrop--20 percent

Sanwell gravelly fine sandy loam, 2 to 4 percent slopes--10 percent

Component Description

Zalda and similar soils

Landform: Hills

Parent material: Residuum weathered from volcanic rocks

Typical vegetation: Spiny menodora, Anderson wolfberry, ephedra, shadscale, white bursage, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 7 inches; loam

Layer 3--7 to 8 inches; indurated

Layer 4--8 to 18 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 7 to 14 inches

Bedrock (lithic): 8 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.8 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA044NV--Loamy Hill 5-8 P.Z.

Component Description

Bluepoint and similar soils

Landform: Sand sheets

Parent material: Eolian sands

Typical vegetation: Winterfat, desert needlegrass, sand dropseed, Indian ricegrass, Nevada ephedra, fourwing saltbush

Typical profile:

Layer 1--0 to 9 inches; loamy fine sand

Layer 2--9 to 17 inches; stratified fine sand to gravelly loamy fine sand

Layer 3--17 to 41 inches; fine sand

Layer 4--41 to 60 inches; stratified sand to very fine sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA063NV--Sandy 5-8 P.Z.

Component Description

Rock outcrop

Landform: Hills

Component Properties and Qualities

Slope: 2 to 30

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Sanwell and similar soils

Composition: 0 to 10 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Spiny menodora, shadscale, Indian ricegrass, desert needlegrass, white bursage, winterfat, spiny hopsage, Nevada ephedra, fourwing saltbush

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2373--Zalda-Rubble land-Skelon complex, 8 to 30 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Hills

Elevation: 2,500 to 3,100

Precipitation: 3 to 7 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Zalda gravelly sandy loam, 8 to 30 percent slopes--40 percent

Rubble land fragmental material, 15 to 30 percent slopes--25 percent

Skelon very gravelly sandy loam, 8 to 15 percent slopes--20 percent

Shorim very gravelly sandy loam, 2 to 15 percent slopes--10 percent

Corbilt gravelly fine sandy loam, 2 to 8 percent slopes--5 percent

Component Description

Zalda and similar soils

Landform: Hills

Parent material: Residuum weathered from volcanic rocks

Typical vegetation: Anderson wolfberry, ephedra, shadscale, white bursage, desert needlegrass, spiny menodora, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 7 inches; loam

Layer 3--7 to 8 inches; indurated

Layer 4--8 to 18 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 30 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 7 to 14 inches

Bedrock (lithic): 8 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.8 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA044NV--Loamy Hill 5-8 P.Z.

Component Description

Rubble land

Landform: Hills

Component Properties and Qualities

Slope: 15 to 30 percent

Runoff: Low

Depth to restrictive feature: Bedrock (lithic): 40 to 60 inches

Interpretive Groups

Nonirrigated land capability: 8s

Ecological site: None assigned

Component Description

Skelon and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny menodora, winterfat, spiny hopsage, Indian ricegrass, desert needlegrass, white bursage, fourwing saltbush, Nevada ephedra, shadscale

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam

Layer 3--28 to 44 inches; indurated

Layer 4--44 to 52 inches; very gravelly sandy loam

Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: High

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Shorim and similar soils

Composition: 0 to 10 percent

Slope: 2 to 15 percent

Landform: Hills

Typical vegetation: Wolfberry, white bursage, creosotebush, shadscale, desert needlegrass, Indian ricegrass

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Corbilt and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Backslopes of fan remnants

Typical vegetation: Desertholly, wolfberry, seepweed, Indian ricegrass

Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2381--Armpup-Ashmed association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,000 to 2,700

Precipitation: 3 to 6 inches

Air temperature: 63 to 70 degrees Fahrenheit

Frost-free period: 210 to 220 days

Composition

Armpup very gravelly sandy clay loam, 4 to 8 percent slopes--55 percent

Ashmed gravelly fine sandy loam, 4 to 8 percent slopes--30 percent

Bacho very gravelly sandy loam, 4 to 8 percent slopes--8 percent

Tecopa extremely gravelly sandy loam, 8 to 15 percent slopes--7 percent

Component Description

Armpup and similar soils

Landform: Ballenas

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, shadscale, creosotebush, pricklypear, sandpaper plant

Typical profile:

Surface rock fragments: About 10 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy clay loam

Layer 2--3 to 18 inches; gravelly clay

Layer 3--18 to 46 inches; extremely gravelly sandy clay

Layer 4--46 to 55 inches; very gravelly loamy sand

Layer 5--55 to 59 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
Runoff: Very high
Depth to restrictive feature: Bedrock (paralithic): 40 to 60 inches
Permeability class (root zone): Slow
Salinity: Saline within 40 inches
Sodicity: Sodic within 40 inches
Available water capacity: About 8 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA047NV--Barren Fan 3-8 P.Z.

Component Description

Ashmed and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Desertholly, Indian ricegrass, seepweed, Fremont dalea, shadscale

Typical profile:

Surface rock fragments: About 10 percent cobbles, 60 percent gravel
Layer 1--0 to 4 inches; gravelly fine sandy loam
Layer 2--4 to 7 inches; gravelly silt loam
Layer 3--7 to 24 inches; extremely gravelly sandy clay loam
Layer 4--24 to 32 inches; extremely gravelly coarse sandy loam
Layer 5--32 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
Runoff: High
Permeability class (root zone): Moderately slow
Salinity: Saline within 40 inches
Sodicity: Sodic within 40 inches
Available water capacity: About 5 inches
Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Bacho and similar soils

Composition: 0 to 8 percent
Slope: 4 to 8 percent
Landform: Partial ballenas
Typical vegetation: Pricklypear, creosotebush, sandpaper plant, shadscale, Indian ricegrass
Ecological site: 030XA047NV--Barren Fan 3-8 P.Z.

Tecopa and similar soils

Composition: 0 to 7 percent
Slope: 8 to 15 percent
Landform: Hills
Typical vegetation: Fremont dalea, shadscale, desertholly, seepweed, Indian ricegrass
Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

2391--Commski-Ashmed complex, 4 to 50 percent slopes

Map Unit Setting

MLRA: 30
Landscape: Fan piedmont
Elevation: 2,300 to 2,800
Precipitation: 3 to 6 inches
Air temperature: 63 to 70 degrees Fahrenheit
Frost-free period: 210 to 220 days

Composition

Commski very gravelly fine sandy loam, 8 to 50 percent slopes--65 percent
Ashmed extremely gravelly sandy loam, 4 to 15 percent slopes--25 percent
Destazo gravelly clay loam, 4 to 8 percent slopes--10 percent

Component Description**Commski and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Shadscale, dalea, wolfberry, seepweed, desertholly

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam

Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 50 percent

Runoff: High

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Component Description**Ashmed and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desertholly, seepweed, Fremont dalea, shadscale, Indian ricegrass

Typical profile:

Surface rock fragments: About 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; extremely gravelly sandy loam

Layer 2--4 to 7 inches; gravelly silt loam

Layer 3--7 to 24 inches; extremely gravelly sandy clay loam

Layer 4--24 to 32 inches; extremely gravelly coarse sandy loam

Layer 5--32 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: High

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Destazo and similar soils**

Composition: 0 to 10 percent

Slope: 4 to 8 percent

Landform: Summits of fan remnants

Typical vegetation: Indian ricegrass, shadscale, Fremont dalea, seepweed, desertholly

Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2392--Commski-Ashmed association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,200 to 2,600

Precipitation: 3 to 6 inches

Air temperature: 63 to 70 degrees Fahrenheit

Frost-free period: 210 to 220 days

Composition

Commski very gravelly fine sandy loam, 8 to 50 percent slopes--65 percent

Ashmed extremely gravelly sandy loam, 4 to 15 percent slopes--25 percent
Yurm very gravelly sandy loam, 2 to 4 percent slopes--10 percent

Component Description

Commski and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Desert needlegrass, shadscale, white bursage, Indian ricegrass, creosotebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam

Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 50 percent

Runoff: High

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Component Description

Ashmed and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, Indian ricegrass, desert needlegrass, creosotebush, Nevada ephedra, white bursage

Typical profile:

Surface rock fragments: About 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; extremely gravelly sandy loam

Layer 2--4 to 7 inches; gravelly silt loam

Layer 3--7 to 24 inches; extremely gravelly sandy clay loam

Layer 4--24 to 32 inches; extremely gravelly coarse sandy loam

Layer 5--32 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: High

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yurm and similar soils

Composition: 0 to 10 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: White bursage, creosotebush, other shrubs, Nevada ephedra, range ratany, big galleta

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2393--Commski-Yermo association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,800 to 4,100

Precipitation: 3 to 6 inches

Air temperature: 62 to 67 degrees Fahrenheit

Frost-free period: 210 to 230 days

Composition

Commski very gravelly fine sandy loam, 2 to 4 percent slopes--70 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--25 percent

Yurm very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Commski and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Indian ricegrass, desert needlegrass, creosotebush, range ratany, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam

Layer 2--5 to 14 inches; extremely gravelly sandy loam

Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, range ratany, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yurm and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Range ratany, white bursage, big galleta, Nevada ephedra, other shrubs, creosotebush

Ecological site: 030XB005NV--Limy 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2400--Mobl-Scottcas association

Map Unit Setting

MLRA: 30

Landscape: Intermontane basin

Elevation: 4,100 to 4,600

Precipitation: 4 to 8 inches

Air temperature: 60 to 62 degrees Fahrenheit

Frost-free period: 180 to 210 days

Composition

Mobl very gravelly fine sandy loam, 0 to 2 percent slopes--65 percent
 Scottcas very gravelly sandy loam, 0 to 2 percent slopes--20 percent
 Cirac gravelly sandy loam, 0 to 2 percent slopes--10 percent
 Wilst very gravelly sandy loam, 4 to 8 percent slopes--5 percent

Component Description**Mobl and similar soils**

Landform: Alluvial flats

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, fourwing saltbush, wolfberry, white burrobrush, spiny menodora, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 75 percent gravel

Layer 1--0 to 2 inches; very gravelly fine sandy loam

Layer 2--2 to 7 inches; sandy clay loam

Layer 3--7 to 17 inches; sandy loam

Layer 4--17 to 60 inches; stratified sandy loam to extremely gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Component Description**Scottcas and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, white burrobrush, wolfberry, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 70 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam

Layer 2--2 to 7 inches; very gravelly sandy clay loam

Layer 3--7 to 15 inches; extremely gravelly sandy loam

Layer 4--15 to 21 inches; very gravelly loamy coarse sand

Layer 5--21 to 60 inches; stratified extremely gravelly loamy coarse sand to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Cirac and similar soils**

Composition: 0 to 10 percent

Slope: 0 to 2 percent

Landform: Alluvial flats

Typical vegetation: Seepweed, Indian ricegrass, black greasewood, alkali sacaton, fourwing saltbush, shadscale, rubber rabbitbrush, inland saltgrass, white burrobrush

Ecological site: 027XY025NV--Sodic Flat

Wilst and similar soils

Composition: 0 to 5 percent

Slope: 4 to 8 percent

Landform: Rock pediments

Typical vegetation: Indian ricegrass, desert needlegrass, white burrobrush, wolfberry, shadscale

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2401--Skelon-Bacho association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,700 to 3,600

Precipitation: 3 to 9 inches

Air temperature: 60 to 63 degrees Fahrenheit

Frost-free period: 180 to 210 days

Composition

Skelon very gravelly sandy loam, 4 to 15 percent slopes--55 percent

Bacho very gravelly sandy loam, 4 to 8 percent slopes--30 percent

Lealandic very gravelly sandy loam, 4 to 8 percent slopes--5 percent

Arizo very gravelly loamy sand, 2 to 4 percent slopes--5 percent

Yermo very gravelly sandy loam, 4 to 8 percent slopes--5 percent

Component Description

Skelon and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Nevada ephedra, creosotebush, shadscale, desert needlegrass, bud sagebrush, Anderson wolfberry

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam

Layer 3--28 to 44 inches; indurated

Layer 4--44 to 52 inches; very gravelly sandy loam

Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: High

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description

Bacho and similar soils

Landform: Partial ballenas

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny menodora, winterfat, spiny hopsage, Nevada ephedra, shadscale, fourwing saltbush, white bursage, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 5 percent stones, 20 percent cobbles, 40 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 11 inches; very gravelly clay

Layer 3--11 to 36 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Permeability class (root zone): Very slow

Available water capacity: About 1.5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Lealandic and similar soils

Composition: 0 to 5 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: Creosotebush, shadscale, white bursage, Indian ricegrass, desert needlegrass, wolfberry

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Arizo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Indian ricegrass, creosotebush, white burrobrush, cattle saltbush, white bursage

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Yermo and similar soils

Composition: 0 to 5 percent

Slope: 4 to 8 percent

Landform: Inset fans

Typical vegetation: Nevada ephedra, Anderson wolfberry, creosotebush, shadscale, bud sagebrush, desert needlegrass

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2421--Orwash-Wilst-Agon complex

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,800 to 4,500

Precipitation: 5 to 9 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 180 to 220 days

Composition

Orwash gravelly sandy loam, 2 to 4 percent slopes--50 percent

Wilst very gravelly sandy loam, 4 to 8 percent slopes--25 percent

Agon very gravelly loamy sand, 2 to 4 percent slopes--20 percent

Typic Argidurids very gravelly sandy loam, 8 to 15 percent slopes--5 percent

Component Description

Orwash and similar soils

Landform: Fan skirts

Parent material: Alluvium derived from granitic rocks

Typical vegetation: Desert needlegrass, bud sagebrush, shadscale, Nevada ephedra, creosotebush, Anderson wolfberry

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 18 inches; stratified gravelly coarse sandy loam to very gravelly loamy coarse sand

Layer 3--18 to 60 inches; stratified gravelly coarse sand to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: Rare

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description

Wilst and similar soils

Landform: Rock pediments

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Creosotebush, desert needlegrass, Anderson wolfberry, Nevada ephedra, shadscale, bud sagebrush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 10 inches; gravelly sandy loam

Layer 3--10 to 33 inches; very gravelly sandy loam

Layer 4--33 to 43 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
 Runoff: High
 Depth to restrictive feature: Bedrock (lithic): 20 to 40 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description**Agon and similar soils**

Landform: Rock pediments
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Desert needlegrass, shadscale, Nevada ephedra, creosotebush, Anderson wolfberry, bud sagebrush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel
 Layer 1--0 to 3 inches; very gravelly loamy sand
 Layer 2--3 to 32 inches; gravelly loamy sand
 Layer 3--32 to 33 inches; indurated
 Layer 4--33 to 37 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 30 to 39 inches
 Bedrock (lithic): 30 to 40 inches
 Permeability class (root zone): Rapid
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Typic Argidurids and similar soils**

Composition: 0 to 5 percent
 Classification: Loamy-skeletal, mixed, superactive, thermic Typic Argidurids
 Slope: 8 to 15 percent
 Landform: Fan remnants
 Typical vegetation: White bursage, Indian ricegrass, creosotebush, Nevada ephedra, blackbrush
 Ecological site: 030XA094NV--Shallow Gravelly Loam 8-12 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Engineering" and "Soil Properties" sections

2422--Orwash-Louderback-Arizo complex, 2 to 4 percent slopes**Map Unit Setting**

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 4,000 to 4,600
 Precipitation: 4 to 8 inches
 Air temperature: 53 to 63 degrees Fahrenheit
 Frost-free period: 150 to 210 days

Composition

Orwash gravelly sandy loam, 2 to 4 percent slopes--45 percent
 Louderback loamy sand, 2 to 4 percent slopes--25 percent
 Arizo very gravelly sandy loam, 2 to 4 percent slopes--15 percent
 Yermo very gravelly sandy loam, 2 to 4 percent slopes--10 percent
 Typic Halaquepts, 0 to 2 percent slopes--5 percent

Component Description**Orwash and similar soils**

Landform: Fan skirts
 Parent material: Alluvium derived from granitic rocks
 Typical vegetation: Indian ricegrass, desert needlegrass, white bursage, fourwing saltbush, Nevada ephedra, spiny hopsage, winterfat, spiny menodora, shadscale

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam
 Layer 2--3 to 18 inches; stratified gravelly coarse sandy loam to very gravelly loamy coarse sand
 Layer 3--18 to 60 inches; stratified gravelly coarse sand to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 3 inches
 Present flooding: Rare
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Louderback and similar soils

Landform: Lake plains
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Other perennial forbs, shadscale, alkali sacaton, black greasewood, other perennial grasses, wolfberry, basin wildrye, inland saltgrass

Typical profile:

Layer 1--0 to 3 inches; loamy sand
 Layer 2--3 to 40 inches; stratified sand to silt loam
 Layer 3--40 to 60 inches; stratified gravelly coarse sand to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Negligible
 Permeability class (root zone): Rapid
 Salinity: Saline within 40 inches
 Sodicty: Sodic within 40 inches
 Available water capacity: About 3 inches
 Present flooding: Rare
 Water table: Present
 Natural drainage class: Somewhat poorly drained

Interpretive Groups

Irrigated land capability: 3s

Nonirrigated land capability: 7w
 Ecological site: 029XY024NV--Sodic Terrace 5-8 P.Z.

Component Description

Arizo and similar soils

Landform: Drainageways
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: White burrobrush, desert needlegrass, bladdersage, Indian ricegrass, creosotebush, cattle saltbush, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel
 Layer 1--0 to 8 inches; very gravelly sandy loam
 Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 3 inches
 Present flooding: Occasional
 Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w
 Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yermo and similar soils

Composition: 0 to 10 percent
 Slope: 2 to 4 percent
 Landform: Inset fans
 Typical vegetation: Anderson wolfberry, creosotebush, Nevada ephedra, shadscale, bud sagebrush, desert needlegrass
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Typic Halaquepts and similar soils

Composition: 0 to 5 percent
 Classification: Coarse-loamy, mixed, superactive, calcareous, mesic Typic Halaquepts

Slope: 0 to 2 percent
 Landform: Lake plains
 Typical vegetation: Baltic rush, black greasewood,
 inland saltgrass, alkali sacaton
 Ecological site: 029XY002NV--Saline Meadow

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2423--Orwash-Greyeagle-Wanomie association

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 4,000 to 4,600
 Precipitation: 5 to 9 inches
 Air temperature: 57 to 63 degrees Fahrenheit
 Frost-free period: 180 to 250 days

Composition

Orwash gravelly sandy loam, 4 to 15 percent slopes--40 percent
 Greyeagle very gravelly sandy loam, 2 to 4 percent slopes--30 percent
 Wanomie very gravelly sandy loam, 2 to 4 percent slopes--20 percent
 Bullfor gravelly loamy sand, 2 to 4 percent slopes--10 percent

Component Description

Orwash and similar soils

Landform: Fan skirts
 Parent material: Alluvium derived from granitic rocks
 Typical vegetation: Nevada ephedra, shadscale, fourwing saltbush, white bursage, desert needlegrass, spiny hopsage, winterfat, spiny menodora, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel
 Layer 1--0 to 3 inches; gravelly sandy loam
 Layer 2--3 to 18 inches; stratified gravelly coarse sandy loam to very gravelly loamy coarse sand
 Layer 3--18 to 60 inches; stratified gravelly coarse sand to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
 Runoff: Low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 3 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Greyeagle and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Indian ricegrass, desert needlegrass, white bursage, fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage, spiny menodora, winterfat

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 6 inches; gravelly sandy loam
 Layer 3--6 to 8 inches; very gravelly sandy loam
 Layer 4--8 to 24 inches; indurated
 Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.6 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description**Wanomie and similar soils**

Landform: Alluvial flats

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage, winterfat, spiny menodora, white bursage, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: About 10 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam

Layer 2--2 to 30 inches; stratified coarse sandy loam to loam

Layer 3--30 to 31 inches; cemented

Layer 4--31 to 60 inches; coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: High

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderate

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Bullfor and similar soils**

Composition: 0 to 10 percent

Slope: 2 to 4 percent

Landform: Sand sheets

Typical vegetation: Spiny menodora, creosotebush, winterfat, Indian ricegrass, ephedra, shadscale, white bursage, desert needlegrass

Ecological site: 030XA068NV--Calcareous Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2425--Orwash-Yermo-Arizo association**Map Unit Setting**

MLRA: 30

Landscape: Fan piedmont

Elevation: 4,000 to 4,200

Precipitation: 4 to 7 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 180 to 210 days

Composition

Orwash gravelly sandy loam, 0 to 2 percent slopes--45 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--25 percent

Arizo very gravelly sandy loam, 0 to 2 percent slopes--20 percent

Corbilt gravelly fine sandy loam, 0 to 2 percent slopes--10 percent

Component Description**Orwash and similar soils**

Landform: Fan skirts

Parent material: Alluvium derived from granitic rocks

Typical vegetation: Shadscale, fourwing saltbush, white bursage, desert needlegrass, Indian ricegrass, winterfat, spiny hopsage, Nevada ephedra, spiny menodora

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 18 inches; stratified gravelly coarse sandy loam to very gravelly loamy coarse sand

Layer 3--18 to 60 inches; stratified gravelly coarse sand to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches
 Present flooding: Rare
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Spiny menodora, winterfat, Nevada ephedra, shadscale, fourwing saltbush, white bursage, desert needlegrass, Indian ricegrass, spiny hopsage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 6 inches; very gravelly sandy loam
 Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Arizo and similar soils

Landform: Drainageways
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Cattle saltbush, white burrobrush, creosotebush, Indian ricegrass, bladdersage, desert needlegrass, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel
 Layer 1--0 to 8 inches; very gravelly sandy loam

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 3 inches
 Present flooding: Occasional
 Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w
 Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Corbilt and similar soils

Composition: 0 to 10 percent
 Slope: 0 to 2 percent
 Landform: Alluvial fans
 Typical vegetation: Shadscale, black greasewood, inland saltgrass
 Ecological site: 027XY025NV--Sodic Flat

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2431--Zibate-Zyplar-Dedas association

Map Unit Setting

MLRA: 30
 Landscape: Hills
 Elevation: 3,500 to 4,500
 Precipitation: 5 to 12 inches
 Air temperature: 55 to 63 degrees Fahrenheit
 Frost-free period: 180 to 210 days

Composition

Zibate very gravelly sandy loam, 15 to 50 percent slopes--55 percent

Zyplar very stony sandy loam, 8 to 15 percent slopes--15 percent

Dedas very gravelly sandy loam, 4 to 50 percent slopes--15 percent

Longjim gravelly fine sandy loam, 4 to 15 percent slopes--8 percent

Gabbvally very stony loam, 15 to 50 percent slopes--7 percent

Component Description

Zibate and similar soils

Landform: Hills

Parent material: Residuum weathered from volcanic rocks

Typical vegetation: Desert needlegrass, Indian ricegrass, blackbrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 45 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 19 inches; extremely gravelly loam

Layer 3--19 to 23 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 20 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7e

Ecological site: 030XA095NV--Shallow Gravelly Slope 8-12 P.Z.

Component Description

Zyplar and similar soils

Landform: Hills

Parent material: Residuum weathered from tuff

Typical vegetation: White bursage, white burrobrush, range ratany, creosotebush, wolfberry, spiny menodora, desert needlegrass, Indian ricegrass, blackbrush, Nevada ephedra, fourwing saltbush

Typical profile:

Surface rock fragments: About 5 percent stones, 10 percent cobbles, 40 percent gravel

Layer 1--0 to 7 inches; very stony sandy loam

Layer 2--7 to 12 inches; gravelly clay loam

Layer 3--12 to 16 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 9 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA095NV--Shallow Gravelly Slope 8-12 P.Z.

Component Description

Dedas and similar soils

Landform: Hills

Parent material: Residuum weathered from tuff

Typical vegetation: Indian ricegrass, creosotebush, Nevada ephedra, blackbrush, white bursage

Typical profile:

Surface rock fragments: About 1 percent stones, 20 percent cobbles, 40 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 15 inches; very gravelly sandy loam

Layer 3--15 to 17 inches; indurated

Layer 4--17 to 27 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 50 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 14 to 20 inches

Bedrock (lithic): 16 to 24 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA094NV--Shallow Gravelly Loam 8-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Longjim and similar soils

Composition: 0 to 8 percent

Slope: 4 to 15 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, wolfberry, white burrobrush, Nevada ephedra, spiny menodora, blackbrush, creosotebush, range ratany, white bursage, desert needlegrass, fourwing saltbush

Ecological site: 030XA095NV--Shallow Gravelly Slope 8-12 P.Z.

Gabbvally and similar soils

Composition: 0 to 7 percent

Slope: 15 to 50 percent

Landform: Rock pediments

Typical vegetation: Bottlebrush squirreltail, Douglas rabbitbrush, Wyoming big sagebrush, desert needlegrass, Indian ricegrass, winterfat, Nevada ephedra, galleta, other perennial forbs, spiny hopsage

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2432--Zibate very gravelly sandy loam, 8 to 15 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Hills

Elevation: 3,800 to 4,600

Precipitation: 9 to 12 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 160 to 200 days

Composition

Zibate very gravelly sandy loam, 8 to 15 percent slopes--85 percent

Zyplar very stony sandy loam, 8 to 15 percent slopes--10 percent

Rock outcrop--5 percent

Component Description

Zibate and similar soils

Landform: Hills

Parent material: Residuum weathered from volcanic rocks

Typical vegetation: Blackbrush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 45 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 19 inches; extremely gravelly loam

Layer 3--19 to 23 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 20 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA095NV--Shallow Gravelly Slope 8-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Zyplar and similar soils

Composition: 0 to 10 percent

Slope: 8 to 15 percent

Landform: Hills

Typical vegetation: Wolfberry, spiny menodora, Indian ricegrass, desert needlegrass, creosotebush, white bursage, fourwing saltbush, blackbrush, Nevada ephedra, white burrobrush, range ratany

Ecological site: 030XA095NV--Shallow Gravelly Slope 8-12 P.Z.

Rock outcrop

Composition: 0 to 5 percent

Landform: Hills
Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

2434--Cruzspring-Schader-Rock outcrop association

Map Unit Setting

MLRA: 30
Landscape: Mountains
Elevation: 4,700 to 6,500
Precipitation: 8 to 12 inches
Air temperature: 51 to 57 degrees Fahrenheit
Frost-free period: 130 to 180 days

Composition

Cruzspring extremely gravelly sandy loam, 15 to 30 percent slopes--40 percent
Schader extremely gravelly sandy loam, 15 to 50 percent slopes--30 percent
Rock outcrop--15 percent
Zibate extremely gravelly sandy loam, 15 to 50 percent slopes--9 percent
Sed very gravelly loam, 15 to 50 percent slopes--4 percent
Veet Family very gravelly sandy loam, 2 to 8 percent slopes--2 percent

Component Description

Cruzspring and similar soils

Landform: Backslopes of mountains
Parent material: Colluvium derived from quartzite over residuum weathered from quartzite
Typical vegetation: Desert bitterbrush, Nevada ephedra, blackbrush, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 60 percent gravel
Layer 1--0 to 1 inches; extremely gravelly sandy loam
Layer 2--1 to 3 inches; very gravelly sandy loam
Layer 3--3 to 10 inches; very gravelly loam
Layer 4--10 to 13 inches; weathered bedrock
Layer 5--13 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent
Runoff: High
Depth to restrictive feature: Bedrock (paralithic): 10 to 14 inches
Bedrock (lithic): 12 to 20 inches
Permeability class (root zone): Moderate
Available water capacity: About 0.8 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 029XY077NV--Shallow Gravelly Loam 8-10 P.Z.

Component Description

Schader and similar soils

Landform: Backslopes of mountains
Parent material: Colluvium derived from quartzite over residuum weathered from quartzite
Typical vegetation: Sandberg bluegrass, ephedra, fourwing saltbush, Wyoming big sagebrush, needleandthread, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 3 percent stones, 10 percent cobbles, 50 percent gravel
Layer 1--0 to 2 inches; extremely gravelly sandy loam
Layer 2--2 to 9 inches; very gravelly loam
Layer 3--9 to 28 inches; extremely gravelly sandy clay loam
Layer 4--28 to 32 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
Runoff: Very high
Depth to restrictive feature: Bedrock (lithic): 20 to 40 inches
Permeability class (root zone): Moderate
Available water capacity: About 2 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description

Rock outcrop

Landform: Mountains

Component Properties and Qualities

Slope: 15 to 50

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Zibate and similar soils**

Composition: 0 to 9 percent

Slope: 15 to 50 percent, north to east aspects

Landform: Mountains

Typical vegetation: Creosotebush, desert needlegrass, Nevada ephedra, blackbrush, big galleta

Ecological site: 030XB076NV--Shallow Gravelly Slope 5-7 P.Z.

Sed and similar soils

Composition: 0 to 4 percent

Slope: 15 to 50 percent

Landform: Mountains

Typical vegetation: Turbinella oak, desert bitterbrush, bluegrass, Indian ricegrass, green ephedra, Mexican cliffrose, needlegrass, curleaf mountainmahogany, Wyoming big sagebrush, manzanita, needleleaf rabbitbrush

Ecological site: 029XY065NV--PIMO-JUOS WSG: OR2

Veet Family flooded and similar soils

Composition: 0 to 2 percent

Classification: Loamy-skeletal, mixed, superactive, mesic Xeric Haplocambids

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Big sagebrush, desert peachbrush, rubber rabbitbrush, skunkbush sumac, Sandberg bluegrass, Indian ricegrass

Ecological site: 029XY009NV--Upland Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Forest land" section

"Engineering" and "Soil Properties" sections

2436--Zibate-Rock outcrop complex, 15 to 50 percent slopes***Map Unit Setting***

MLRA: 30

Landscape: Hills

Elevation: 3,800 to 5,000

Precipitation: 8 to 10 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 180 to 230 days

Composition

Zibate extremely gravelly sandy loam, 15 to 50 percent slopes--70 percent

Rock outcrop--15 percent

Tecopa extremely gravelly sandy loam, 15 to 50 percent slopes--7 percent

Cruzspring extremely gravelly sandy loam, 15 to 50 percent slopes--4 percent

Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--2 percent

Irongold extremely gravelly loam, 8 to 15 percent slopes--2 percent

Component Description**Zibate and similar soils**

Landform: Hills

Parent material: Residuum weathered from volcanic rocks

Typical vegetation: Desert needlegrass, creosotebush, big galleta, Nevada ephedra, blackbrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 45 percent gravel

Layer 1--0 to 1 inches; extremely gravelly sandy loam

Layer 2--1 to 6 inches; very gravelly sandy loam

Layer 3--6 to 19 inches; extremely gravelly loam

Layer 4--19 to 23 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent, north to east aspects

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 20 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB076NV--Shallow Gravelly Slope
5-7 P.Z.

Component Description**Rock outcrop**

Landform: Hills

Component Properties and Qualities

Slope: 15 to 50

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Tecopa and similar soils**

Composition: 0 to 7 percent

Slope: 15 to 50 percent

Landform: Hills

Typical vegetation: White bursage, creosotebush

Ecological site: 030XB001NV--Limy Hill 5-7 P.Z.

Cruzspring and similar soils

Composition: 0 to 4 percent

Slope: 15 to 50 percent

Landform: Backslopes of hills

Typical vegetation: Desert needlegrass, Nevada
ephedra, desert bitterbrush, blackbrush

Ecological site: 029XY077NV--Shallow Gravelly Loam
8-10 P.Z.

Niavi and similar soils

Composition: 0 to 2 percent

Slope: 2 to 8 percent

Landform: Stream terraces

Typical vegetation: White bursage, range ratany, big
galleta, Mojave buckwheat, ephedra, creosotebush,
Virgin River encelia, Anderson's wolfberry

Ecological site: 030XB134NV--Quartzite Outwash

Irongold and similar soils

Composition: 0 to 2 percent

Slope: 8 to 15 percent

Landform: Fan remnants

Typical vegetation: Bush muhly, desert needlegrass,
creosotebush, big galleta, Nevada ephedra,
blackbrush

Ecological site: 030XB029NV--Shallow Gravelly Loam
5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2437--Cruzspring-Rock outcrop complex, 15 to 50 percent slopes***Map Unit Setting***

MLRA: 30

Landscape: Mountains

Elevation: 4,700 to 6,500

Precipitation: 8 to 10 inches

Air temperature: 51 to 57 degrees Fahrenheit

Frost-free period: 150 to 200 days

Composition

Cruzspring extremely gravelly sandy loam, 15 to 50 percent slopes--70 percent

Rock outcrop--15 percent

Zibate extremely gravelly sandy loam, 15 to 50 percent slopes--8 percent

Schader extremely gravelly sandy loam, 15 to 50 percent slopes--4 percent

Sed very gravelly loam, 15 to 50 percent slopes--2 percent

Veet Family very gravelly sandy loam, 2 to 8 percent slopes--1 percent

Component Description**Cruzspring and similar soils**

Landform: Backslopes of mountains

Parent material: Colluvium derived from quartzite over
residuum weathered from quartzite

Typical vegetation: Nevada ephedra, desert
bitterbrush, desert needlegrass, blackbrush

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 60 percent gravel

Layer 1--0 to 1 inches; extremely gravelly sandy loam

Layer 2--1 to 3 inches; very gravelly sandy loam

Layer 3--3 to 10 inches; very gravelly loam

Layer 4--10 to 13 inches; weathered bedrock

Layer 5--13 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (paralithic): 10 to 14 inches
 Bedrock (lithic): 12 to 20 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.8 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY077NV--Shallow Gravelly Loam 8-10 P.Z.

Component Description**Rock outcrop**

Landform: Mountains

Component Properties and Qualities

Slope: 15 to 50

Interpretive Groups

Nonirrigated land capability: Not determined
 Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Zibate and similar soils**

Composition: 0 to 8 percent
 Slope: 15 to 50 percent, north to east aspects
 Landform: Mountains
 Typical vegetation: Nevada ephedra, blackbrush, desert needlegrass, creosotebush, big galleta
 Ecological site: 030XB076NV--Shallow Gravelly Slope 5-7 P.Z.

Schader and similar soils

Composition: 0 to 4 percent
 Slope: 15 to 50 percent
 Landform: Backslopes of mountains
 Typical vegetation: Desert needlegrass, Indian ricegrass, Wyoming big sagebrush, fourwing saltbush, ephedra, needleandthread, Sandberg bluegrass
 Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Sed and similar soils

Composition: 0 to 2 percent
 Slope: 15 to 50 percent
 Landform: Mountains

Typical vegetation: Needleleaf rabbitbrush, curleaf mountainmahogany, green ephedra, Indian ricegrass, bluegrass, desert bitterbrush, turbinella oak, needlegrass, Mexican cliffrose, Wyoming big sagebrush, manzanita
 Ecological site: 029XY065NV--PIMO-JUOS WSG: OR2

Veet Family flooded and similar soils

Composition: 0 to 1 percent
 Classification: Loamy-skeletal, mixed, superactive, mesic Xeric Haplocambids
 Slope: 2 to 8 percent
 Landform: Drainageways
 Typical vegetation: Sandberg bluegrass, Indian ricegrass, skunkbush sumac, rubber rabbitbrush, desert peachbrush, big sagebrush
 Ecological site: 029XY009NV--Upland Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Forest land" section
 "Engineering" and "Soil Properties" sections

2441--Lewdlac-Sanwell association***Map Unit Setting***

MLRA: 30
 Landscape: Bolson
 Elevation: 2,400 to 2,700
 Precipitation: 3 to 5 inches
 Air temperature: 63 to 68 degrees Fahrenheit
 Frost-free period: 210 to 240 days

Composition

Lewdlac gravelly loamy fine sand, 2 to 8 percent slopes--50 percent
 Sanwell gravelly fine sandy loam, 2 to 8 percent slopes--35 percent
 Nowoy gravelly sandy loam, 8 to 15 percent slopes--9 percent
 Mobl fine sandy loam, 2 to 4 percent slopes--6 percent

Component Description**Lewdlac and similar soils**

Landform: Alluvial flats
 Parent material: Alluvium derived from mixed rocks over lacustrine deposits

Typical vegetation: Shadscale, creosotebush, desert alysum, wolfberry, Indian ricegrass, other perennial forbs, other perennial grasses, other shrubs, white bursage

Typical profile:

Surface rock fragments: About 60 percent gravel
 Layer 1--0 to 3 inches; gravelly loamy fine sand
 Layer 2--3 to 16 inches; fine sandy loam
 Layer 3--16 to 21 inches; cemented
 Layer 4--21 to 60 inches; stratified gravelly loam to extremely gravelly clay

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 10 to 20 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Sanwell and similar soils

Landform: Alluvial flats
 Parent material: Lacustrine deposits
 Typical vegetation: Indian ricegrass, wolfberry, creosotebush, shadscale, desert needlegrass, white bursage

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 9 inches; gravelly fine sandy loam
 Layer 2--9 to 16 inches; gravelly fine sandy loam
 Layer 3--16 to 31 inches; very gravelly coarse sandy loam
 Layer 4--31 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Medium
 Permeability class (root zone): Moderate
 Sodicty: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Nowoy and similar soils

Composition: 0 to 9 percent
 Slope: 8 to 15 percent
 Landform: Alluvial flats
 Typical vegetation: Fremont dalea, Indian ricegrass, Sierra chinkapin, seepweed, desertholly
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Mobl and similar soils

Composition: 0 to 6 percent
 Slope: 2 to 4 percent
 Landform: Alluvial flats
 Typical vegetation: Desert alysum, white burrobrush, white bursage, creosotebush, desert needlegrass, Indian ricegrass
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2451--Sanwell-Sanwell, warm-Yermo association

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,600 to 4,000
 Precipitation: 3 to 6 inches
 Air temperature: 59 to 63 degrees Fahrenheit
 Frost-free period: 200 to 230 days

Composition

Sanwell gravelly fine sandy loam, 0 to 4 percent slopes--40 percent
 Sanwell gravelly fine sandy loam, 0 to 4 percent slopes--25 percent
 Yermo very gravelly sandy loam, 0 to 4 percent slopes--20 percent
 Wilst very gravelly sandy loam, 4 to 8 percent slopes--8 percent
 Lewdlac gravelly loamy fine sand, 2 to 4 percent slopes--4 percent
 Wanomie very gravelly sandy loam, 0 to 4 percent slopes--3 percent

Component Description**Sanwell and similar soils**

Landform: Alluvial flats
 Parent material: Lacustrine deposits
 Typical vegetation: White bursage, Indian ricegrass, desert needlegrass, wolfberry, creosotebush, shadscale

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 9 inches; gravelly fine sandy loam
 Layer 2--9 to 16 inches; gravelly fine sandy loam
 Layer 3--16 to 31 inches; very gravelly coarse sandy loam
 Layer 4--31 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: Low
 Permeability class (root zone): Moderate
 Sodicty: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description**Sanwell and similar soils**

Landform: Alluvial flats

Parent material: Lacustrine deposits

Typical vegetation: White bursage, shadscale, range ratany, creosotebush, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 9 inches; gravelly fine sandy loam
 Layer 2--9 to 16 inches; gravelly fine sandy loam
 Layer 3--16 to 31 inches; very gravelly coarse sandy loam
 Layer 4--31 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: Low
 Permeability class (root zone): Moderate
 Sodicty: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description**Yermo and similar soils**

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Indian ricegrass, creosotebush, shadscale

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 6 inches; very gravelly sandy loam
 Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Wilst and similar soils

Composition: 0 to 8 percent
 Slope: 4 to 8 percent
 Landform: Rock pediments
 Typical vegetation: Desert alysum, Indian ricegrass, desert needlegrass, creosotebush, white bursage, white burrobrush
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Lewdlac and similar soils

Composition: 0 to 4 percent
 Slope: 2 to 4 percent
 Landform: Alluvial flats
 Typical vegetation: White bursage, shadscale, creosotebush, wolfberry, Indian ricegrass, other perennial forbs, other perennial grasses, other shrubs, desert alysum
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Wanomie and similar soils

Composition: 0 to 3 percent
 Slope: 0 to 4 percent
 Landform: Fan remnants
 Typical vegetation: Desert needlegrass, Indian ricegrass, creosotebush, white bursage, white burrobrush, desert alysum
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2461--Nowoy-Skelon association

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,300 to 2,700
 Precipitation: 3 to 5 inches
 Air temperature: 61 to 64 degrees Fahrenheit
 Frost-free period: 200 to 220 days

Composition

Nowoy gravelly loamy fine sand, 2 to 8 percent slopes--60 percent
 Skelon gravelly sandy loam, 0 to 4 percent slopes--25 percent
 Lewdlac gravelly loamy fine sand, 0 to 4 percent slopes--10 percent
 Bluepoint loamy fine sand, 0 to 4 percent slopes--3 percent
 Yermo very gravelly sandy loam, 0 to 4 percent slopes--2 percent

Component Description

Nowoy and similar soils

Landform: Alluvial flats
 Parent material: Alluvium derived from mixed rocks over lacustrine deposits
 Typical vegetation: Pale wolfberry, white burrobrush, inland saltgrass, cattle saltbush, shadscale, white bursage

Typical profile:

Surface rock fragments: About 45 percent gravel
 Layer 1--0 to 3 inches; gravelly loamy fine sand
 Layer 2--3 to 20 inches; very gravelly sandy loam
 Layer 3--20 to 60 inches; clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Medium
 Permeability class (root zone): Moderately slow
 Available water capacity: About 9 inches
 Present flooding: Rare
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA057NV--Dry Sodic Terrace 3-8 P.Z.

Component Description**Skelon and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Creosotebush, shadscale, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; gravelly sandy loam

Layer 2--4 to 28 inches; stratified very gravelly fine sandy loam to very gravelly coarse sandy loam

Layer 3--28 to 44 inches; indurated

Layer 4--44 to 52 inches; very gravelly sandy loam

Layer 5--52 to 60 inches; extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: High

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Lewdlac and similar soils**

Composition: 0 to 10 percent

Slope: 0 to 4 percent

Landform: Alluvial flats

Typical vegetation: Other perennial grasses, other shrubs, other perennial forbs, Indian ricegrass, shadscale, white bursage, wolfberry, desert alysum, creosotebush

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Bluepoint and similar soils

Composition: 0 to 3 percent

Slope: 0 to 4 percent

Landform: Sand sheets

Typical vegetation: Desert needlegrass, sand dropseed, Indian ricegrass, winterfat, white bursage, creosotebush, fourwing saltbush

Ecological site: 030XA069NV--Limy Sand 5-8 P.Z.

Yermo and similar soils

Composition: 0 to 2 percent

Slope: 0 to 4 percent

Landform: Inset fans

Typical vegetation: Shadscale, creosotebush, Indian ricegrass

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2471--Lewdlac-Yermo association***Map Unit Setting***

MLRA: 30

Landscape: Intermontane basin

Elevation: 2,600 to 4,000

Precipitation: 3 to 6 inches

Air temperature: 62 to 68 degrees Fahrenheit

Frost-free period: 200 to 230 days

Composition

Lewdlac gravelly loamy fine sand, 2 to 4 percent slopes--70 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--15 percent

Corbilt gravelly fine sandy loam, 2 to 4 percent slopes--9 percent

Wanomie very gravelly sandy loam, 2 to 4 percent slopes--3 percent

Greyeagle very gravelly sandy loam, 2 to 4 percent slopes--3 percent

Component Description**Lewdlac and similar soils**

Landform: Alluvial flats

Parent material: Alluvium derived from mixed rocks over lacustrine deposits

Typical vegetation: Other perennial forbs, other shrubs, other perennial grasses, wolfberry, Indian ricegrass, desert alysum, creosotebush, shadscale, white bursage

Typical profile:

Surface rock fragments: About 60 percent gravel
 Layer 1--0 to 3 inches; gravelly loamy fine sand
 Layer 2--3 to 16 inches; fine sandy loam
 Layer 3--16 to 21 inches; cemented
 Layer 4--21 to 60 inches; stratified gravelly loam to extremely gravelly clay

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 10 to 20 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Shadscale, creosotebush, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 6 inches; very gravelly sandy loam
 Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Corbilt and similar soils

Composition: 0 to 9 percent
 Slope: 2 to 4 percent
 Landform: Alluvial fans
 Typical vegetation: Indian ricegrass, desert needlegrass, creosotebush, shadscale
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Wanomie and similar soils

Composition: 0 to 3 percent
 Slope: 2 to 4 percent
 Landform: Fan remnants
 Typical vegetation: Creosotebush, desert needlegrass, Indian ricegrass, desert alysum, white burrobrush, white bursage
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Greyeagle and similar soils

Composition: 0 to 3 percent
 Slope: 2 to 4 percent
 Landform: Fan remnants
 Typical vegetation: Creosotebush, Indian ricegrass, desert alysum, white burrobrush, white bursage, desert needlegrass
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2481--Bacho-Greyeagle association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont

Elevation: 3,500 to 4,500

Precipitation: 5 to 9 inches

Air temperature: 61 to 63 degrees Fahrenheit

Frost-free period: 190 to 250 days

Composition

Bacho very gravelly sandy loam, 4 to 8 percent slopes--70 percent

Greyeagle very gravelly sandy loam, 8 to 50 percent slopes--20 percent

Strozi sandy loam, 2 to 8 percent slopes--7 percent

Yermo very gravelly sandy loam, 2 to 8 percent slopes--3 percent

Component Description

Bacho and similar soils

Landform: Partial ballenas

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, fourwing saltbush, white bursage, Nevada ephedra, spiny hopsage, winterfat, desert needlegrass, Indian ricegrass, spiny menodora

Typical profile:

Surface rock fragments: About 5 percent stones, 20 percent cobbles, 40 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 11 inches; very gravelly clay

Layer 3--11 to 36 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Permeability class (root zone): Very slow

Available water capacity: About 1.5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Greyeagle and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny hopsage, Nevada ephedra, shadscale, fourwing saltbush, winterfat, spiny menodora, white bursage, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 6 inches; gravelly sandy loam

Layer 3--6 to 8 inches; very gravelly sandy loam

Layer 4--8 to 24 inches; indurated

Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 50 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.6 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Strozi and similar soils

Composition: 0 to 7 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, desert needlegrass, white bursage, fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage, winterfat, spiny menodora

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Yermo and similar soils

Composition: 0 to 3 percent

Slope: 2 to 8 percent

Landform: Inset fans

Typical vegetation: White bursage, fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage, winterfat, spiny menodora, desert needlegrass, Indian ricegrass

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2482--Bacho-Yermo association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,500 to 4,800

Precipitation: 4 to 9 inches

Air temperature: 59 to 64 degrees Fahrenheit

Frost-free period: 180 to 220 days

Composition

Bacho very gravelly sandy loam, 4 to 15 percent slopes--55 percent

Yermo very gravelly sandy loam, 4 to 8 percent slopes--30 percent

Strozi gravelly fine sandy loam, 2 to 8 percent slopes--10 percent

Greyeagle very gravelly sandy loam, 2 to 8 percent slopes--5 percent

Component Description

Bacho and similar soils

Landform: Partial ballenas

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny menodora, desert needlegrass, shadscale, fourwing saltbush, white bursage, Nevada ephedra, Indian ricegrass, spiny hopsage, winterfat

Typical profile:

Surface rock fragments: About 5 percent stones, 20 percent cobbles, 40 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 11 inches; very gravelly clay

Layer 3--11 to 36 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Permeability class (root zone): Very slow

Available water capacity: About 1.5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, bud sagebrush, Anderson wolfberry, creosotebush, Nevada ephedra, shadscale

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Strozi and similar soils

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Spiny menodora, winterfat, spiny hopsage, Nevada ephedra, fourwing saltbush,

shadscale, desert needlegrass, white bursage, Indian ricegrass

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Greyeagle and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, desert needlegrass, white bursage, fourwing saltbush, spiny menodora, shadscale, Nevada ephedra, spiny hopsage, winterfat

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2491--Downeyville-Blacktop-Tokoper association

Map Unit Setting

MLRA: 29

Landscape: Hills

Elevation: 4,500 to 6,300

Precipitation: 4 to 8 inches

Air temperature: 48 to 55 degrees Fahrenheit

Frost-free period: 110 to 150 days

Composition

Downeyville very gravelly sandy loam, 30 to 50 percent slopes--35 percent

Blacktop very stony fine sandy loam, 30 to 50 percent slopes--30 percent

Tokoper very cobbly sandy loam, 30 to 50 percent slopes--20 percent

Izo very gravelly sand, 2 to 8 percent slopes--10 percent

Tomel very gravelly sandy loam, 0 to 8 percent slopes--5 percent

Component Description

Downeyville and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Bud sagebrush, shadscale, dalea, Nevada ephedra, winterfat, galleta, spiny menodora, Indian ricegrass, black greasewood, desert needlegrass, bottlebrush squirreltail

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 9 inches; very gravelly loam

Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.6 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Blacktop and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Shadscale, Nevada dalea, Cooper wolfberry, Indian ricegrass, black greasewood, horsebrush, bud sagebrush

Typical profile:

Surface rock fragments: About 15 percent stones, 10 percent cobbles, 35 percent gravel

Layer 1--0 to 7 inches; very stony fine sandy loam

Layer 2--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 10 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.4 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7e

Ecological site: 029XY033NV--Sodic Hill 3-5 P.Z.

Component Description**Tokoper and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Galleta, desert needlegrass, Nevada ephedra, shadscale, spiny horsebrush, black greasewood, Indian ricegrass, spiny menodora, wolfberry

Typical profile:

Surface rock fragments: 5 percent stones, about 15 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; very cobbly sandy loam

Layer 2--3 to 9 inches; very gravelly clay loam

Layer 3--9 to 14 inches; extremely gravelly loam

Layer 4--14 to 15 inches; indurated

Layer 5--15 to 25 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 50 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Bedrock (lithic): 8 to 15 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Izo and similar soils**

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Cooper wolfberry, spiny hopsage, Nevada ephedra, burrobrush, fourwing saltbush, littleleaf horsebrush, rubber rabbitbrush, Indian ricegrass

Ecological site: 029XY041NV--Dry Wash

Tomel and similar soils

Composition: 0 to 5 percent

Slope: 0 to 8 percent

Landform: Fan remnants

Typical vegetation: Bud sagebrush, shadscale, desert needlegrass, black greasewood, Indian ricegrass, fourwing saltbush, Nevada ephedra, galleta, winterfat

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2492--Downeyville-Silverbow-Rock outcrop association**Map Unit Setting**

MLRA: 29

Landscape: Hills

Elevation: 4,800 to 5,600

Precipitation: 4 to 8 inches

Air temperature: 46 to 55 degrees Fahrenheit

Frost-free period: 100 to 140 days

Composition

Downeyville very gravelly fine sandy loam, 15 to 30 percent slopes--40 percent

Silverbow gravelly sandy loam, 8 to 30 percent slopes--35 percent

Rock outcrop--15 percent

Izo very gravelly sand, 2 to 8 percent slopes--4 percent

Blacktop very gravelly sandy loam, 30 to 75 percent slopes--3 percent

Downeyville very gravelly sandy loam, 15 to 75 percent slopes--3 percent

Component Description**Downeyville and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Spiny menodora, bottlebrush squirreltail, galleta, winterfat, Nevada ephedra, dalea, shadscale, desert needlegrass, bud sagebrush, Indian ricegrass, black greasewood

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam
 Layer 2--4 to 9 inches; very gravelly loam
 Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 15 to 30 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14
 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.7 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Silverbow and similar soils

Landform: Hills
 Parent material: Alluvium and colluvium derived from
 volcanic rocks
 Typical vegetation: Littleleaf horsebrush, desert
 needlegrass, black greasewood, Indian ricegrass,
 spiny menodora, Anderson wolfberry, bud sagebrush,
 shadscale, Nevada ephedra, winterfat, galleta

Typical profile:

Surface rock fragments: About 5 percent stones, 15
 percent cobbles, 45 percent gravel
 Layer 1--0 to 2 inches; gravelly sandy loam
 Layer 2--2 to 10 inches; very cobbly clay loam
 Layer 3--10 to 18 inches; indurated
 Layer 4--18 to 40 inches; cemented

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 8 to 30 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Permeability class (root zone): Moderately slow
 Available water capacity: About 0.9 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Rock outcrop

Landform: Hills

Component Properties and Qualities

Slope: 8 to 30

Interpretive Groups

Nonirrigated land capability: Not determined
 Ecological site: None assigned

Typical soil descriptions including ranges in
 characteristics are in the "Classification of the Soils"
 section.

Contrasting Inclusions

Izo and similar soils

Composition: 0 to 4 percent
 Slope: 2 to 8 percent
 Landform: Drainageways
 Typical vegetation: Fourwing saltbush, burrobrush,
 Nevada ephedra, spiny hopsage, Cooper wolfberry,
 littleleaf horsebrush, rubber rabbitbrush, Indian
 ricegrass
 Ecological site: 029XY041NV--Dry Wash

Blacktop and similar soils

Composition: 0 to 3 percent
 Slope: 30 to 75 percent
 Landform: Hills
 Typical vegetation: Bud sagebrush, Indian ricegrass,
 shadscale, winterfat, galleta
 Ecological site: 029XY022NV--Loamy Slope 5-8 P.Z.

Downeyville and similar soils

Composition: 0 to 3 percent
 Slope: 15 to 75 percent
 Landform: Hills
 Typical vegetation: Nevada dalea, shadscale, Indian
 ricegrass
 Ecological site: 029XY033NV--Loamy Slope 3-5 P.Z.

Management

For information about managing this map unit, see
 the following sections and associated tables in Part II
 of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2493--Downeyville-Tognoni-Stonell association

Map Unit Setting

MLRA: 29

Landscape: Hills

Elevation: 5,000 to 6,000

Precipitation: 4 to 8 inches

Air temperature: 48 to 55 degrees Fahrenheit

Frost-free period: 110 to 140 days

Composition

Downeyville very gravelly fine sandy loam, 15 to 30 percent slopes--30 percent

Tognoni very cobbly fine sandy loam, 15 to 50 percent slopes--30 percent

Stonell gravelly sandy loam, 2 to 8 percent slopes--25 percent

Izo very gravelly sand, 2 to 8 percent slopes--10 percent

Tomel very gravelly sandy loam, 8 to 15 percent slopes--5 percent

Component Description

Downeyville and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass, spiny menodora, galleta, winterfat, Nevada ephedra, dalea, shadscale, bud sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam

Layer 2--4 to 9 inches; very gravelly loam

Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Tognoni and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass, spiny menodora, galleta, winterfat, Nevada ephedra, shadscale, dalea, bud sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 20 percent cobbles, 40 percent gravel

Layer 1--0 to 4 inches; very cobbly fine sandy loam

Layer 2--4 to 14 inches; very cobbly clay loam

Layer 3--14 to 24 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 5 to 14 inches

Permeability class (root zone): Slow

Available water capacity: About 1.4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Stonell and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bud sagebrush, shadscale, Nevada dalea, Nevada ephedra, winterfat, galleta, Anderson wolfberry, Indian ricegrass, desert needlegrass, littleleaf horsebrush

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 8 inches; very gravelly sandy clay loam
 Layer 3--8 to 60 inches; stratified very gravelly sandy loam to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: High
 Permeability class (root zone): Moderately slow
 Salinity: Saline within 40 inches
 Available water capacity: About 3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Izo and similar soils

Composition: 0 to 10 percent
 Slope: 2 to 8 percent
 Landform: Drainageways
 Typical vegetation: Nevada ephedra, spiny hopsage, Cooper wolfberry, littleleaf horsebrush, fourwing saltbush, rubber rabbitbrush, Indian ricegrass, burrobrush
 Ecological site: 029XY041NV--Dry Wash

Tomel and similar soils

Composition: 0 to 5 percent
 Slope: 8 to 15 percent
 Landform: Fan remnants
 Typical vegetation: Dalea, spiny menodora, black greasewood, winterfat, Nevada ephedra, bottlebrush squirreltail, bud sagebrush, desert needlegrass, galleta, Indian ricegrass, shadscale
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2494--Downeyville-Vindicator-Stewval association

Map Unit Setting

MLRA: 29
 Landscape: Mountains
 Elevation: 5,500 to 6,500
 Precipitation: 5 to 10 inches
 Air temperature: 45 to 55 degrees Fahrenheit
 Frost-free period: 100 to 140 days

Composition

Downeyville very gravelly fine sandy loam, 15 to 50 percent slopes--35 percent
 Vindicator very gravelly sandy loam, 2 to 15 percent slopes--25 percent
 Stewval very gravelly fine sandy loam, 15 to 50 percent slopes--25 percent
 Gabbvally very gravelly sandy loam, 8 to 15 percent slopes--8 percent
 Izo very gravelly sand, 2 to 8 percent slopes--7 percent

Component Description

Downeyville and similar soils

Landform: Mountains
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Indian ricegrass, Nevada ephedra, galleta, dalea, desert needlegrass, bottlebrush squirreltail, spiny menodora, shadscale, winterfat, bud sagebrush, black greasewood

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 4 inches; very gravelly fine sandy loam
 Layer 2--4 to 9 inches; very gravelly loam
 Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.7 inches
 Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Vindicator and similar soils

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Nevada ephedra, Nevada dalea, fourwing saltbush, winterfat, galleta, desert needlegrass, Indian ricegrass, Anderson wolfberry, spiny hopsage

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 45 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam

Layer 2--2 to 7 inches; very gravelly clay loam

Layer 3--7 to 11 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (paralithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY021NV--Loamy Hill 5-8 P.Z.

Component Description

Stewval and similar soils

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Galleta, Indian ricegrass, bluegrass, winterfat, needlegrass, black sagebrush, Nevada ephedra

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 55 percent gravel

Layer 1--0 to 1 inches; very gravelly fine sandy loam

Layer 2--1 to 7 inches; very gravelly loam

Layer 3--7 to 11 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY014NV--Shallow Calcareous

Slope 8-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Gabbvally and similar soils

Composition: 0 to 8 percent

Slope: 8 to 15 percent

Landform: Mountains

Typical vegetation: Spiny hopsage, galleta, Indian ricegrass, bottlebrush squirreltail, desert needlegrass, other perennial forbs, winterfat, Douglas rabbitbrush, Wyoming big sagebrush, Nevada ephedra

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Izo and similar soils

Composition: 0 to 7 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Rubber rabbitbrush, fourwing saltbush, burrobrush, Nevada ephedra, spiny hopsage, Cooper wolfberry, littleleaf horsebrush, Indian ricegrass

Ecological site: 029XY041NV--Dry Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2495--Downeyville-Gabbvally association***Map Unit Setting***

MLRA: 29

Landscape: Hills

Elevation: 5,000 to 6,400

Precipitation: 5 to 10 inches

Air temperature: 48 to 55 degrees Fahrenheit

Frost-free period: 100 to 140 days

Composition

Downeyville very gravelly fine sandy loam, 15 to 50 percent slopes--55 percent

Gabbvally very gravelly sandy loam, 15 to 50 percent slopes--30 percent

Pintwater very gravelly fine sandy loam, 30 to 50 percent slopes--5 percent

Stewval very gravelly fine sandy loam, 15 to 30 percent slopes--5 percent

Tognoni Family very cobbly fine sandy loam, 15 to 50 percent slopes--5 percent

Component Description**Downeyville and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Shadscale, winterfat, spiny menodora, Indian ricegrass, black greasewood, bottlebrush squirreltail, desert needlegrass, bud sagebrush, dalea, Nevada ephedra, galleta

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam

Layer 2--4 to 9 inches; very gravelly loam

Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description**Gabbvally and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Indian ricegrass, other perennial forbs, Wyoming big sagebrush, Douglas rabbitbrush, Nevada ephedra, winterfat, spiny hopsage, galleta, desert needlegrass, bottlebrush squirreltail**Typical profile:**

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 12 inches; very gravelly loam

Layer 3--12 to 16 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Pintwater and similar soils**

Composition: 0 to 5 percent

Slope: 30 to 50 percent

Landform: Hills

Typical vegetation: Black greasewood, bud sagebrush, Indian ricegrass, Nevada dalea, shadscale, Cooper wolfberry, horsebrush

Ecological site: 029XY033NV--Sodic Hill 3-5 P.Z.

Stewval and similar soils

Composition: 0 to 5 percent

Slope: 15 to 30 percent

Landform: Hills

Typical vegetation: Winterfat, galleta, bluegrass, black sagebrush, Indian ricegrass, Nevada ephedra, needlegrass

Ecological site: 029XY014NV--Shallow Calcareous

Slope 8-12 P.Z.

Tognoni Family and similar soils

Composition: 0 to 5 percent

Classification: Loamy-skeletal, mixed, superactive, mesic Lithic Haplargids

Slope: 15 to 50 percent

Landform: Rock pediments

Typical vegetation: Spiny menodora, Indian ricegrass, winterfat, ephedra, desert needlegrass, white bursage, creosotebush, shadscale

Ecological site: 030XA068NV--Calcareous Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2496--Downeyville-Pintwater-Upspring association**Map Unit Setting**

MLRA: 29

Landscape: Hills

Elevation: 4,000 to 6,500

Precipitation: 4 to 8 inches

Air temperature: 50 to 64 degrees Fahrenheit

Frost-free period: 120 to 240 days

Composition

Downeyville very gravelly fine sandy loam, 30 to 75 percent slopes--40 percent

Pintwater very gravelly fine sandy loam, 30 to 75 percent slopes--30 percent

Upspring very gravelly sandy loam, 30 to 75 percent slopes--15 percent

Rock outcrop--10 percent

Gabbvally very stony loam, 15 to 50 percent slopes--5 percent

Component Description**Downeyville and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Bottlebrush squirreltail, galleta, black greasewood, Indian ricegrass, dalea, bud sagebrush, desert needlegrass, spiny menodora, shadscale, winterfat, Nevada ephedra**Typical profile:**

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam

Layer 2--4 to 9 inches; very gravelly loam

Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description**Pintwater and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Dalea, shadscale, bud sagebrush, black greasewood, Indian ricegrass, Nevada ephedra, bottlebrush squirreltail, desert needlegrass, winterfat, galleta, spiny menodora**Typical profile:**

Surface rock fragments: About 5 percent stones, 5 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam

Layer 2--4 to 11 inches; extremely gravelly sandy loam

Layer 3--11 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: High

Depth to restrictive feature: Bedrock (lithic): 10 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 1.0 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description**Upspring and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Indian ricegrass, spiny menodora, creosotebush, ephedra, desert needlegrass, winterfat, shadscale, white bursage

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam

Layer 2--2 to 12 inches; very gravelly fine sandy loam

Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.8 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA068NV--Calcareous Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Rock outcrop**

Composition: 0 to 10 percent

Landform: Hills

Ecological site: None assigned

Gabbvally and similar soils

Composition: 0 to 5 percent

Slope: 15 to 50 percent

Landform: Hills

Typical vegetation: Winterfat, Nevada ephedra, other perennial forbs, galleta, Indian ricegrass, spiny hopsage, desert needlegrass, bottlebrush squirreltail, Douglas rabbitbrush, Wyoming big sagebrush
Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.***Management***

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2500--Commski-Greyeagle association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,300 to 3,000

Precipitation: 3 to 7 inches

Air temperature: 63 to 70 degrees Fahrenheit

Frost-free period: 230 to 260 days

Composition

Commski very gravelly fine sandy loam, 4 to 30 percent slopes--70 percent

Greyeagle very gravelly sandy loam, 15 to 50 percent slopes--20 percent

Bullfor gravelly loamy sand, 2 to 4 percent slopes--10 percent

Component Description**Commski and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Indian ricegrass, creosotebush, white bursage, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly fine sandy loam
 Layer 2--5 to 14 inches; extremely gravelly sandy loam
 Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 30 percent
 Runoff: Medium
 Permeability class (root zone): Moderate
 Available water capacity: About 3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description

Greyeagle and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Nevada ephedra, desert needlegrass, Indian ricegrass, creosotebush, shadscale, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 6 inches; gravelly sandy loam
 Layer 3--6 to 8 inches; very gravelly sandy loam
 Layer 4--8 to 24 inches; indurated
 Layer 5--24 to 60 inches; stratified extremely cobbly loamy sand to very gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.6 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Bullfor and similar soils

Composition: 0 to 10 percent
 Slope: 2 to 4 percent
 Landform: Sand sheets
 Typical vegetation: Desert needlegrass, bud sagebrush, shadscale, Nevada ephedra, creosotebush, Anderson wolfberry
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2501--Wanomie-Corbilt association

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,700 to 4,100
 Precipitation: 5 to 9 inches
 Air temperature: 58 to 63 degrees Fahrenheit
 Frost-free period: 200 to 220 days

Composition

Wanomie sandy loam, 0 to 2 percent slopes--60 percent
 Corbilt gravelly fine sandy loam, 0 to 2 percent slopes--25 percent
 Bullfor gravelly loamy sand, 0 to 2 percent slopes--8 percent
 Playas silty clay loam--5 percent
 Sanwell gravelly fine sandy loam, 2 to 4 percent slopes--2 percent

Component Description

Wanomie and similar soils

Landform: Alluvial flats
 Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, wolfberry, desert needlegrass, white burrobrush, shadscale

Typical profile:

Surface rock fragments: About 10 percent gravel

Layer 1--0 to 2 inches; sandy loam

Layer 2--2 to 30 inches; stratified coarse sandy loam to loam

Layer 3--30 to 31 inches; cemented

Layer 4--31 to 60 inches; coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: High

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderate

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Component Description

Corbilt and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, shadscale, white burrobrush, wolfberry, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel

Layer 1--0 to 4 inches; gravelly fine sandy loam

Layer 2--4 to 32 inches; gravelly fine sandy loam

Layer 3--32 to 56 inches; very gravelly sandy loam

Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Very low

Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 6 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Bullfor low precipitation and similar soils

Composition: 0 to 8 percent

Slope: 0 to 2 percent

Landform: Sand sheets

Typical vegetation: Wolfberry, white burrobrush, shadscale, white bursage, Indian ricegrass, desert needlegrass

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Playas

Composition: 0 to 5 percent

Landform: Playas

Ecological site: None assigned

Sanwell and similar soils

Composition: 0 to 2 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, desert needlegrass, shadscale, white bursage, white burrobrush

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2510--Fuegosta-Tomel-Izo association

Map Unit Setting

MLRA: 29

Landscape: Fan piedmont

Elevation: 4,700 to 5,800

Precipitation: 4 to 8 inches

Air temperature: 52 to 57 degrees Fahrenheit

Frost-free period: 130 to 150 days

Composition

Fuegosta gravelly fine sandy loam, 2 to 4 percent slopes--40 percent

Tomel very gravelly sandy loam, 2 to 4 percent slopes--25 percent

Izo very gravelly sand, 0 to 2 percent slopes--20 percent

Vigus gravelly sandy loam, 4 to 30 percent slopes--10 percent

Typic Haplodurids gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Fuegosta and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Galleta, spiny horsebrush, desert needlegrass, Indian ricegrass, spiny menodora, black greasewood, Nevada ephedra, shadscale, bud sagebrush, spiny hopsage

Typical profile:

Surface rock fragments: About 1 percent stones, 4 percent cobbles, 80 percent gravel

Layer 1--0 to 4 inches; gravelly fine sandy loam

Layer 2--4 to 14 inches; gravelly clay

Layer 3--14 to 18 inches; very gravelly sandy loam

Layer 4--18 to 26 inches; indurated

Layer 5--26 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 14 to 20 inches

Permeability class (root zone): Slow

Salinity: Saline within 40 inches

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Tomel and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, black greasewood, Indian ricegrass, galleta, winterfat, Nevada ephedra, shadscale, fourwing saltbush, bud sagebrush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 50 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 19 inches; very gravelly sandy clay loam

Layer 3--19 to 26 inches; indurated

Layer 4--26 to 60 inches; extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 10 to 20 inches

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Izo and similar soils

Landform: Drainageways

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Littleleaf horsebrush, Indian ricegrass, Cooper wolfberry, fourwing saltbush, burrobrush, spiny hopsage, Nevada ephedra, rubber rabbitbrush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel

Layer 1--0 to 9 inches; very gravelly sand

Layer 2--9 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
Runoff: Negligible
Permeability class (root zone): Rapid
Available water capacity: About 2 inches
Present flooding: Occasional
Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w
Ecological site: 029XY041NV--Dry Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Vigus and similar soils

Composition: 0 to 10 percent
Slope: 4 to 30 percent
Landform: Fan remnants
Typical vegetation: Galleta, bud sagebrush, Indian ricegrass, black greasewood, spiny menodora, winterfat, bottlebrush squirreltail, shadscale, Cooper wolfberry
Ecological site: 029XY036NV--Cobbly Loam 5-8 P.Z.

Typic Haplodurids and similar soils

Composition: 0 to 5 percent
Classification: Loamy-skeletal, mixed, superactive, mesic, shallow Typic Haplodurids
Slope: 2 to 4 percent
Landform: Fan remnants
Typical vegetation: Littleleaf horsebrush, desert needlegrass, black greasewood, Indian ricegrass, spiny menodora, Anderson wolfberry, galleta, winterfat, Nevada ephedra, shadscale, bud sagebrush
Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

2511--Fuegosta-Wardenot-Izo association

Map Unit Setting

MLRA: 29

Landscape: Fan piedmont
Elevation: 4,600 to 5,600
Precipitation: 4 to 8 inches
Air temperature: 52 to 57 degrees Fahrenheit
Frost-free period: 130 to 150 days

Composition

Fuegosta gravelly fine sandy loam, 2 to 4 percent slopes--45 percent
Wardenot gravelly sandy loam, 0 to 4 percent slopes--30 percent
Izo very gravelly sand, 0 to 4 percent slopes--20 percent
Laxal gravelly sandy loam, 0 to 2 percent slopes--5 percent

Component Description

Fuegosta and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Black greasewood, Nevada ephedra, shadscale, galleta, spiny hopsage, spiny horsebrush, desert needlegrass, Indian ricegrass, spiny menodora, bud sagebrush

Typical profile:

Surface rock fragments: About 1 percent stones, 4 percent cobbles, 80 percent gravel
Layer 1--0 to 4 inches; gravelly fine sandy loam
Layer 2--4 to 14 inches; gravelly clay
Layer 3--14 to 18 inches; very gravelly sandy loam
Layer 4--18 to 26 inches; indurated
Layer 5--26 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
Runoff: Very high
Depth to restrictive feature: Duripan: 14 to 20 inches
Permeability class (root zone): Slow
Salinity: Saline within 40 inches
Available water capacity: About 2 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description**Wardenot and similar soils**

Landform: Fan aprons

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Galleta, shadscale, bud sagebrush, winterfat, Indian ricegrass, black greasewood, bottlebrush squirreltail, desert needlegrass, fourwing saltbush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; gravelly sandy loam

Layer 2--5 to 60 inches; stratified very gravelly fine sandy loam to extremely cobbly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: Rare

Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description**Izo and similar soils**

Landform: Drainageways

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, Cooper wolfberry, burrobrush, spiny hopsage, littleleaf horsebrush, Nevada ephedra, rubber rabbitbrush, fourwing saltbush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel

Layer 1--0 to 8 inches; very gravelly sand

Layer 2--8 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Negligible

Permeability class (root zone): Rapid

Available water capacity: About 2 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 029XY041NV--Dry Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Laxal and similar soils**

Composition: 0 to 5 percent

Slope: 0 to 2 percent

Landform: Fan skirts

Typical vegetation: Bottlebrush squirreltail, Indian ricegrass, black greasewood, desert needlegrass, bud sagebrush, galleta, winterfat, Nevada ephedra, shadscale, fourwing saltbush

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2520--Vigus-Fuegosta-Izo association***Map Unit Setting***

MLRA: 29

Landscape: Fan piedmont

Elevation: 4,700 to 5,800

Precipitation: 4 to 8 inches

Air temperature: 52 to 57 degrees Fahrenheit

Frost-free period: 130 to 150 days

Composition

Vigus gravelly sandy loam, 0 to 4 percent slopes--40 percent

Fuegosta gravelly fine sandy loam, 2 to 4 percent slopes--25 percent

Izo very gravelly sand, 0 to 4 percent slopes--25 percent

Stargo fine sandy loam, 0 to 2 percent slopes--10 percent

Component Description

Vigus and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Winterfat, Nevada ephedra, shadscale, bud sagebrush, black greasewood, galleta, Indian ricegrass, bottlebrush squirreltail, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent cobbles, 50 percent gravel

Layer 1--0 to 7 inches; gravelly sandy loam

Layer 2--7 to 13 inches; loam

Layer 3--13 to 60 inches; stratified gravelly loamy sand to sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Sodicity: Sodic within 40 inches

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4e

Nonirrigated land capability: 7e

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Fuegosta and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny hopsage, spiny horsebrush, desert needlegrass, black greasewood, Indian ricegrass, spiny menodora, galleta, Nevada ephedra, shadscale, bud sagebrush

Typical profile:

Surface rock fragments: About 1 percent stones, 4 percent cobbles, 80 percent gravel

Layer 1--0 to 4 inches; gravelly fine sandy loam

Layer 2--4 to 14 inches; gravelly clay

Layer 3--14 to 18 inches; very gravelly sandy loam

Layer 4--18 to 26 inches; indurated

Layer 5--26 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 14 to 20 inches

Permeability class (root zone): Slow

Salinity: Saline within 40 inches

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Izo and similar soils

Landform: Drainageways

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Littleleaf horsebrush, Nevada ephedra, rubber rabbitbrush, Indian ricegrass, Cooper wolfberry, burrobrush, spiny hopsage, fourwing saltbush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel

Layer 1--0 to 8 inches; very gravelly sand

Layer 2--8 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Negligible

Permeability class (root zone): Rapid

Available water capacity: About 2 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 029XY041NV--Dry Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Stargo overwash and similar soils

Composition: 0 to 10 percent

Slope: 0 to 2 percent

Landform: Alluvial flats

Typical vegetation: Spiny hopsage, Nevada ephedra, Indian ricegrass, burrobrush, fourwing saltbush, rubber rabbitbrush, littleleaf horsebrush, Cooper wolfberry

Ecological site: 029XY041NV--Dry Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2521--Vigus-Wardenot-Fuegosta association

Map Unit Setting

MLRA: 29

Landscape: Fan piedmont

Elevation: 4,800 to 6,000

Precipitation: 4 to 8 inches

Air temperature: 52 to 57 degrees Fahrenheit

Frost-free period: 130 to 150 days

Composition

Vigus gravelly sandy loam, 2 to 4 percent slopes--35 percent

Wardenot gravelly sandy loam, 0 to 4 percent slopes--30 percent

Fuegosta gravelly fine sandy loam, 2 to 4 percent slopes--25 percent

Izo very gravelly sand, 2 to 4 percent slopes--10 percent

Component Description

Vigus and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, Nevada ephedra, bud sagebrush, galleta, Indian ricegrass, black greasewood, bottlebrush squirreltail, desert needlegrass, winterfat

Typical profile:

Surface rock fragments: About 1 percent cobbles, 50 percent gravel

Layer 1--0 to 7 inches; gravelly sandy loam

Layer 2--7 to 13 inches; loam

Layer 3--13 to 60 inches; stratified gravelly loamy sand to sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Sodicity: Sodic within 40 inches

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4e

Nonirrigated land capability: 7e

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Wardenot and similar soils

Landform: Fan aprons

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, desert needlegrass, bottlebrush squirreltail, black greasewood, galleta, winterfat, shadscale, fourwing saltbush, bud sagebrush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; gravelly sandy loam

Layer 2--5 to 60 inches; stratified very gravelly fine sandy loam to extremely cobbly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: Rare

Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description**Fuegosta and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Nevada ephedra, Indian ricegrass, spiny menodora, spiny hopsage, shadscale, spiny horsebrush, desert needlegrass, black greasewood, bud sagebrush, galleta

Typical profile:

Surface rock fragments: About 1 percent stones, 4 percent cobbles, 80 percent gravel

Layer 1--0 to 4 inches; gravelly fine sandy loam

Layer 2--4 to 14 inches; gravelly clay

Layer 3--14 to 18 inches; very gravelly sandy loam

Layer 4--18 to 26 inches; indurated

Layer 5--26 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 14 to 20 inches

Permeability class (root zone): Slow

Salinity: Saline within 40 inches

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Izo and similar soils**

Composition: 0 to 10 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Cooper wolfberry, spiny hopsage, Nevada ephedra, burrobrush, fourwing saltbush, rubber rabbitbrush, littleleaf horsebrush, Indian ricegrass

Ecological site: 029XY041NV--Dry Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2531--Laxal-Stonell-Unsel association***Map Unit Setting***

MLRA: 29

Landscape: Intermontane basin

Elevation: 5,100 to 5,700

Precipitation: 5 to 8 inches

Air temperature: 48 to 57 degrees Fahrenheit

Frost-free period: 120 to 140 days

Composition

Laxal gravelly sandy loam, 2 to 8 percent slopes--30 percent

Stonell gravelly sandy loam, 2 to 8 percent slopes--30 percent

Unsel gravelly sandy loam, 2 to 8 percent slopes--25 percent

Izo very gravelly sand, 2 to 8 percent slopes--10 percent

Abruptic Argidurids gravelly fine sandy loam, 2 to 4 percent slopes--5 percent

Component Description**Laxal and similar soils**

Landform: Fan skirts

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass, galleta, winterfat, Nevada ephedra, shadscale, fourwing saltbush, bud sagebrush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 30 percent gravel

Layer 1--0 to 4 inches; gravelly sandy loam

Layer 2--4 to 60 inches; stratified very gravelly sandy loam to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Salinity: Saline within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Irrigated land capability: 4e

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Stonell and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bud sagebrush, Nevada ephedra, littleleaf horsebrush, desert needlegrass, Indian ricegrass, Anderson wolfberry, galleta, winterfat, Nevada dalea, shadscale

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 8 inches; very gravelly sandy clay loam

Layer 3--8 to 60 inches; stratified very gravelly sandy loam to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Unsel and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bud sagebrush, bottlebrush squirreltail, desert needlegrass, fourwing saltbush, shadscale, Nevada ephedra, winterfat, galleta, Indian ricegrass, black greasewood

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 55 percent gravel

Layer 1--0 to 7 inches; gravelly sandy loam

Layer 2--7 to 11 inches; gravelly clay loam

Layer 3--11 to 20 inches; gravelly sandy loam

Layer 4--20 to 60 inches; very gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Permeability class (root zone): Moderately slow

Sodicity: Sodic within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 3e

Nonirrigated land capability: 7c

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Izo and similar soils

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Littleleaf horsebrush, Nevada ephedra, Cooper wolfberry, spiny hopsage, burrobrush, fourwing saltbush, Indian ricegrass, rubber rabbitbrush

Ecological site: 029XY041NV--Dry Wash

Abruptic Argidurids and similar soils

Composition: 0 to 5 percent

Classification: Fine, smectitic, mesic Abruptic Argidurids

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Nevada ephedra, spiny hopsage, spiny menodora, galleta, shadscale, black greasewood, spiny horsebrush, desert needlegrass, bud sagebrush, Indian ricegrass

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2532--Laxal-Fang association

Map Unit Setting

MLRA: 29

Landscape: Intermontane basin

Elevation: 4,700 to 5,300

Precipitation: 5 to 8 inches

Air temperature: 54 to 57 degrees Fahrenheit

Frost-free period: 130 to 150 days

Composition

Laxal gravelly sandy loam, 2 to 4 percent slopes--50 percent

Fang sandy loam, 0 to 2 percent slopes--35 percent

Izo very gravelly sand, 2 to 8 percent slopes--10 percent

Vigus gravelly sandy loam, 0 to 4 percent slopes--5 percent

Component Description

Laxal and similar soils

Landform: Fan skirts

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Fourwing saltbush, shadscale, Nevada ephedra, winterfat, galleta, Indian ricegrass, black greasewood, bottlebrush squirreltail, desert needlegrass, bud sagebrush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 30 percent gravel

Layer 1--0 to 4 inches; gravelly sandy loam

Layer 2--4 to 60 inches; stratified very gravelly sandy loam to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Salinity: Saline within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Fang and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, Douglas rabbitbrush, Nevada dalea, winterfat, spiny hopsage, galleta, desert needlegrass, bud sagebrush, fourwing saltbush, Indian ricegrass

Typical profile:

Layer 1--0 to 3 inches; sandy loam

Layer 2--3 to 42 inches; fine sandy loam

Layer 3--42 to 64 inches; stratified loam to very gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Low

Permeability class (root zone): Moderate

Available water capacity: About 7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 2s

Nonirrigated land capability: 7c

Ecological site: 029XY046NV--Sandy Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Izo and similar soils**

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Spiny hopsage, rubber rabbitbrush, Indian ricegrass, littleleaf horsebrush, Cooper wolfberry, Nevada ephedra, burrobrush, fourwing saltbush

Ecological site: 029XY041NV--Dry Wash

Vigus and similar soils

Composition: 0 to 5 percent

Slope: 0 to 4 percent

Landform: Fan remnants

Typical vegetation: Desert needlegrass, black greasewood, winterfat, Nevada ephedra, shadscale, bud sagebrush, galleta, Indian ricegrass, bottlebrush squirreltail

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2540--Lidan-Izo association***Map Unit Setting***

MLRA: 29

Landscape: Fan piedmont

Elevation: 4,800 to 5,600

Precipitation: 4 to 8 inches

Air temperature: 54 to 59 degrees Fahrenheit

Frost-free period: 140 to 180 days

Composition

Lidan gravelly sandy loam, 8 to 15 percent slopes--65 percent

Izo very gravelly sand, 4 to 15 percent slopes--20 percent

Veet very gravelly sandy loam, 4 to 15 percent slopes--5 percent

Ardivey very gravelly sandy loam, 8 to 15 percent slopes--5 percent

Leo gravelly sandy loam, 4 to 8 percent slopes--5 percent

Component Description**Lidan and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, Indian ricegrass, bud sagebrush, spiny menodora, globemallow, shadscale, ephedra, winterfat, galleta, Anderson wolfberry

Typical profile:

Surface rock fragments: About 1 percent stones, 2 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; gravelly sandy loam

Layer 2--5 to 14 inches; very gravelly clay

Layer 3--14 to 30 inches; extremely gravelly sandy clay loam

Layer 4--30 to 36 inches; indurated

Layer 5--36 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description**Izo and similar soils**

Landform: Drainageways

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Nevada ephedra, spiny hopsage, burrobrush, Cooper wolfberry, rubber rabbitbrush, littleleaf horsebrush, Indian ricegrass, fourwing saltbush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel

Layer 1--0 to 8 inches; very gravelly sand

Layer 2--8 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: Very low

Permeability class (root zone): Rapid

Available water capacity: About 2 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 029XY041NV--Dry Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Veet and similar soils

Composition: 0 to 5 percent

Slope: 4 to 15 percent

Landform: Inset fans

Typical vegetation: Nevada ephedra, fourwing saltbush, desert needlegrass, galleta, Wyoming big sagebrush, Indian ricegrass, spiny hopsage

Ecological site: 029XY006NV--Loamy 8-10 P.Z.

Ardivey and similar soils

Composition: 0 to 5 percent

Slope: 8 to 15 percent

Landform: Fan remnants

Typical vegetation: Bud sagebrush, winterfat, Nevada ephedra, shadscale, galleta, Cooper wolfberry, spiny menodora, Indian ricegrass, black greasewood, bottlebrush squirreltail, desert needlegrass

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Leo and similar soils

Composition: 0 to 5 percent

Slope: 4 to 8 percent

Landform: Inset fans

Typical vegetation: Littleleaf horsebrush, Nevada ephedra, bud sagebrush, desert needlegrass, Indian ricegrass, galleta, spiny hopsage, Anderson wolfberry
Ecological site: 029XY016NV--Loamy Upland 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2550--Stonewall-Izo-Lidan association

Map Unit Setting

MLRA: 29

Landscape: Fan piedmont

Elevation: 4,600 to 5,200

Precipitation: 4 to 8 inches

Air temperature: 54 to 59 degrees Fahrenheit

Frost-free period: 140 to 180 days

Composition

Stonewall gravelly fine sandy loam, 8 to 15 percent slopes--60 percent

Izo very gravelly sand, 4 to 8 percent slopes--15 percent

Lidan gravelly sandy loam, 8 to 15 percent slopes--15 percent

Veet very gravelly sandy loam, 4 to 8 percent slopes--5 percent

Leo gravelly sandy loam, 4 to 8 percent slopes--5 percent

Component Description

Stonewall and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Nevada ephedra, black greasewood, bud sagebrush, Indian ricegrass, spiny menodora, Anderson wolfberry, galleta, spiny hopsage, shadscale

Typical profile:

Surface rock fragments: About 5 percent stones, 15 percent cobbles, 50 percent gravel

Layer 1--0 to 4 inches; gravelly fine sandy loam

Layer 2--4 to 16 inches; very gravelly clay

Layer 3--16 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Very high

Permeability class (root zone): Slow

Salinity: Saline within 40 inches

Available water capacity: About 3 inches

Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Izo and similar soils

Landform: Drainageways
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Indian ricegrass, Cooper wolfberry, burrobrush, spiny hopsage, Nevada ephedra, rubber rabbitbrush, littleleaf horsebrush, fourwing saltbush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel
 Layer 1--0 to 3 inches; very gravelly sand
 Layer 2--3 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
 Runoff: Very low
 Permeability class (root zone): Rapid
 Available water capacity: About 2 inches
 Present flooding: Occasional
 Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w
 Ecological site: 029XY041NV--Dry Wash

Component Description

Lidan and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Anderson wolfberry, bud sagebrush, globemallow, desert needlegrass, Indian ricegrass, spiny menodora, galleta, winterfat, ephedra, shadscale

Typical profile:

Surface rock fragments: About 1 percent stones, 2 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; gravelly sandy loam
 Layer 2--5 to 14 inches; very gravelly clay
 Layer 3--14 to 30 inches; extremely gravelly sandy clay loam
 Layer 4--30 to 36 inches; indurated
 Layer 5--36 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 20 to 40 inches
 Permeability class (root zone): Slow
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Veet and similar soils

Composition: 0 to 5 percent
 Slope: 4 to 8 percent
 Landform: Inset fans
 Typical vegetation: Fourwing saltbush, desert needlegrass, Indian ricegrass, galleta, Wyoming big sagebrush, spiny hopsage, Nevada ephedra
 Ecological site: 029XY006NV--Loamy 8-10 P.Z.

Leo and similar soils

Composition: 0 to 5 percent
 Slope: 4 to 8 percent
 Landform: Inset fans
 Typical vegetation: Littleleaf horsebrush, Nevada ephedra, bud sagebrush, desert needlegrass, Indian ricegrass, galleta, spiny hopsage, Anderson wolfberry
 Ecological site: 029XY016NV--Loamy Upland 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2570--Stargo-Playas association***Map Unit Setting***

MLRA: 29

Landscape: Bolson

Elevation: 4,600 to 4,800

Precipitation: 5 to 8 inches

Air temperature: 52 to 57 degrees Fahrenheit

Frost-free period: 130 to 150 days

Composition

Stargo fine sandy loam, 0 to 2 percent slopes--70 percent

Playas silty clay loam, 0 to 1 percent slopes--20 percent

Durinodic Natrargids gravelly sandy loam, 0 to 2 percent slopes--5 percent

Cirac gravelly sandy loam, 0 to 2 percent slopes--3 percent

Unsel gravelly sandy loam, 2 to 4 percent slopes--2 percent

Component Description**Stargo and similar soils**

Landform: Lake plains

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, winterfat, bud sagebrush, black greasewood, Indian ricegrass, bottlebrush squirreltail, shadscale, Nevada ephedra, other perennial forbs, galleta

Typical profile:

Layer 1--0 to 4 inches; fine sandy loam

Layer 2--4 to 10 inches; sandy clay loam

Layer 3--10 to 60 inches; stratified sandy loam to very gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Available water capacity: About 6 inches

Present flooding: Occasional

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Irrigated land capability: 3w

Nonirrigated land capability: 7w

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description**Playas**

Landform: Playas

Component Properties and Qualities

Slope: 0 to 1 percent

Runoff: Negligible

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Water table: Present

Interpretive Groups

Nonirrigated land capability: 8w

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Durinodic Natrargids and similar soils**

Composition: 0 to 5 percent

Classification: Fine-loamy, mixed, superactive, mesic

Durinodic Natrargids

Slope: 0 to 2 percent

Landform: Fan remnants

Typical vegetation: Black greasewood, bottlebrush squirreltail, desert needlegrass, Indian ricegrass, galleta, bud sagebrush, fourwing saltbush, shadscale, Nevada ephedra, winterfat

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Cirac and similar soils

Composition: 0 to 3 percent

Slope: 0 to 2 percent

Landform: Drainageways

Typical vegetation: Indian ricegrass, shadscale, black greasewood, bud sagebrush, bottlebrush squirreltail, fourwing saltbush

Ecological site: 029XY024NV--Sodic Terrace 5-8 P.Z.

Unsel and similar soils

Composition: 0 to 2 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Winterfat, shadscale, fourwing saltbush, bud sagebrush, galleta, Nevada ephedra, desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2580--Wardenot-Izo association

Map Unit Setting

MLRA: 29
 Landscape: Fan piedmont
 Elevation: 4,500 to 5,500
 Precipitation: 4 to 8 inches
 Air temperature: 52 to 57 degrees Fahrenheit
 Frost-free period: 100 to 140 days

Composition

Wardenot very gravelly loamy sand, 2 to 8 percent slopes--50 percent
 Izo very gravelly sand, 2 to 4 percent slopes--35 percent
 Izo very gravelly sand, 2 to 4 percent slopes--8 percent
 Leo fine sand, 2 to 4 percent slopes--7 percent

Component Description

Wardenot and similar soils

Landform: Fan aprons
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Galleta, Indian ricegrass, black greasewood, bottlebrush squirreltail, shadscale, fourwing saltbush, desert needlegrass, winterfat, bud sagebrush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel
 Layer 1--0 to 5 inches; very gravelly loamy sand
 Layer 2--5 to 60 inches; stratified very gravelly fine sandy loam to extremely cobbly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very low
 Permeability class (root zone): Rapid
 Available water capacity: About 3 inches
 Present flooding: Rare
 Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Izo and similar soils

Landform: Drainageways
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Littleleaf horsebrush, Indian ricegrass, Cooper wolfberry, burrobrush, spiny hopsage, Nevada ephedra, rubber rabbitbrush, fourwing saltbush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel
 Layer 1--0 to 8 inches; very gravelly sand
 Layer 2--8 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Negligible
 Permeability class (root zone): Rapid
 Available water capacity: About 2 inches
 Present flooding: Occasional
 Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w
 Ecological site: 029XY041NV--Dry Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Izo and similar soils

Composition: 0 to 8 percent
 Slope: 2 to 4 percent
 Landform: Inset fans
 Typical vegetation: Fourwing saltbush, littleleaf horsebrush, Cooper wolfberry, spiny hopsage, Nevada ephedra, burrobrush, rubber rabbitbrush, Indian ricegrass
 Ecological site: 029XY041NV--Dry Wash

Leo and similar soils

Composition: 0 to 7 percent
 Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: Indian ricegrass, sand dropseed, winterfat, fourwing saltbush, needleandthread

Ecological site: 029XY012NV--Sandy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2601--Cobatus-Kawich complex, 0 to 2 percent slopes

Map Unit Setting

MLRA: 29

Landscape: Bolson

Elevation: 3,900 to 4,300

Precipitation: 4 to 9 inches

Air temperature: 55 to 60 degrees Fahrenheit

Frost-free period: 130 to 220 days

Composition

Cobatus loam, 0 to 2 percent slopes--65 percent

Kawich fine sand, 0 to 2 percent slopes--25 percent

Corbilt gravelly fine sandy loam, 0 to 2 percent slopes--10 percent

Component Description

Cobatus and similar soils

Landform: Lake plains

Parent material: Alluvium derived from mixed rocks over lacustrine deposits

Typical vegetation: Black greasewood, Baltic rush, basin wildrye, inland saltgrass, seepweed, rubber rabbitbrush, alkali sacaton, shadscale

Typical profile:

Layer 1--0 to 2 inches; loam

Layer 2--2 to 14 inches; loam

Layer 3--14 to 60 inches; loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 11 inches

Present flooding: None

Water table: Present

Natural drainage class: Somewhat poorly drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 029XY004NV--Saline Bottom

Component Description

Kawich and similar soils

Landform: Dunes

Parent material: Eolian sands

Typical vegetation: Fourwing saltbush, Indian ricegrass, black greasewood, horsebrush, needleandthread

Typical profile:

Layer 1--0 to 2 inches; fine sand

Layer 2--2 to 60 inches; fine sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Negligible

Permeability class (root zone): Very rapid

Salinity: Saline within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 027XY016NV--Sodic Dunes

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Corbilt and similar soils

Composition: 0 to 10 percent

Slope: 0 to 2 percent

Landform: Fan skirts

Typical vegetation: Indian ricegrass, shadscale, black greasewood

Ecological site: 029XY064NV--Dry Sodic Terrace

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2611--Corbilt very gravelly sandy loam, 0 to 8 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Intermontane basin

Elevation: 2,400 to 2,800

Precipitation: 3 to 7 inches

Air temperature: 60 to 68 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Corbilt very gravelly sandy loam, 0 to 8 percent slopes--85 percent

Greyeagle very gravelly sandy loam, 0 to 2 percent slopes--10 percent

Playas silty clay loam, 0 to 1 percent slopes--5 percent

Component Description**Corbilt and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, white bursage, fourwing saltbush, shadscale, Nevada ephedra, spiny hopsage, winterfat, spiny menodora, desert needlegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel
 Layer 1--0 to 4 inches; very gravelly sandy loam
 Layer 2--4 to 32 inches; gravelly fine sandy loam
 Layer 3--32 to 56 inches; very gravelly sandy loam
 Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 8 percent

Runoff: Very low

Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Greyeagle and similar soils**

Composition: 0 to 10 percent

Slope: 0 to 2 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, white bursage, spiny menodora, winterfat, spiny hopsage, Nevada ephedra, shadscale, fourwing saltbush, desert needlegrass

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Playas and similar soils

Composition: 0 to 5 percent

Slope: 0 to 1 percent

Landform: Playas

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2630--Wechech-Commski association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,400 to 2,800

Precipitation: 3 to 7 inches

Air temperature: 64 to 70 degrees Fahrenheit

Frost-free period: 210 to 230 days

Composition

Wechech gravelly loam, 2 to 15 percent slopes--55 percent

Commski very gravelly fine sandy loam, 2 to 15 percent slopes--40 percent

Wodavar extremely gravelly fine sandy loam, 2 to 8 percent slopes--5 percent

Component Description

Wechech and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from limestone and dolomite
Typical vegetation: Ephedra, shadscale, white bursage, range ratany, creosotebush, wolfberry, Indian ricegrass, Fremont dalea, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent cobbles, 45 percent gravel
Layer 1--0 to 2 inches; gravelly loam
Layer 2--2 to 7 inches; very gravelly sandy loam
Layer 3--7 to 60 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent
Runoff: Very high
Depth to restrictive feature: Petrocalcic: 7 to 20 inches
Permeability class (root zone): Moderate
Available water capacity: About 0.7 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description

Commski and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from limestone and dolomite
Typical vegetation: Desert needlegrass, Indian ricegrass, creosotebush, white bursage, range ratany

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 55 percent gravel
Layer 1--0 to 5 inches; very gravelly fine sandy loam
Layer 2--5 to 14 inches; extremely gravelly sandy loam
Layer 3--14 to 60 inches; extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent
Runoff: Medium
Permeability class (root zone): Moderate
Available water capacity: About 3 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA058NV--Limy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Wodavar and similar soils

Composition: 0 to 5 percent
Slope: 2 to 8 percent
Landform: Lake terraces
Typical vegetation: Shadscale, creosotebush, Indian ricegrass, desert needlegrass
Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
"Range" section
"Engineering" and "Soil Properties" sections

2640--Downeyville-Advokay-Pintwater association

Map Unit Setting

MLRA: 29
Landscape: Hills
Elevation: 5,200 to 5,800
Precipitation: 4 to 8 inches
Air temperature: 48 to 55 degrees Fahrenheit
Frost-free period: 100 to 140 days

Composition

Downeyville very gravelly fine sandy loam, 15 to 50 percent slopes--35 percent

Advokay gravelly sandy loam, 8 to 15 percent slopes--35 percent

Pintwater very gravelly fine sandy loam, 15 to 50 percent slopes--15 percent

Tokoper very cobbly sandy loam, 30 to 50 percent slopes--7 percent

Rock outcrop--5 percent

Stewval very gravelly fine sandy loam, 15 to 50 percent slopes--3 percent

Component Description

Downeyville and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Shadscale, dalea, Nevada ephedra, bud sagebrush, galleta, spiny menodora, Indian ricegrass, black greasewood, bottlebrush squirreltail, desert needlegrass, winterfat

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam

Layer 2--4 to 9 inches; very gravelly loam

Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Advokay and similar soils

Landform: Hills

Parent material: Colluvium derived from mixed rocks over residuum weathered from mixed rocks

Typical vegetation: Galleta, bottlebrush squirreltail, shadscale, fourwing saltbush, bud sagebrush, winterfat, Indian ricegrass, black greasewood, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 35 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 7 inches; gravelly sandy clay loam

Layer 3--7 to 11 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (paralithic): 4 to 14 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 0.8 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Pintwater and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Galleta, desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass, spiny menodora, shadscale, winterfat, Nevada ephedra, dalea, bud sagebrush

Typical profile:

Surface rock fragments: About 5 percent stones, 5 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam

Layer 2--4 to 11 inches; extremely gravelly sandy loam

Layer 3--11 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 10 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 1.0 inches

Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Tokoper and similar soils

Composition: 0 to 7 percent
 Slope: 30 to 50 percent
 Landform: Hills
 Typical vegetation: Spiny menodora, black greasewood, winterfat, Nevada ephedra, dalea, shadscale, bud sagebrush, galleta, bottlebrush squirreltail, desert needlegrass, Indian ricegrass
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Rock outcrop

Composition: 0 to 5 percent
 Landform: Hills
 Ecological site: None assigned

Stewval and similar soils

Composition: 0 to 3 percent
 Slope: 15 to 50 percent
 Landform: Hills
 Typical vegetation: Winterfat, galleta, bluegrass, black sagebrush, Indian ricegrass, Nevada ephedra, needlegrass
 Ecological site: 029XY014NV--Shallow Calcareous Slope 8-12 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2641--Advokay-Ardivey-Leo association

Map Unit Setting

MLRA: 29
 Landscape: Fan piedmont
 Elevation: 5,400 to 5,900
 Precipitation: 4 to 8 inches
 Air temperature: 50 to 55 degrees Fahrenheit
 Frost-free period: 100 to 140 days

Composition

Advokay gravelly sandy loam, 8 to 15 percent slopes--35 percent
 Ardivey very gravelly sandy loam, 2 to 8 percent slopes--30 percent
 Leo gravelly sandy loam, 2 to 8 percent slopes--20 percent
 Rock outcrop--5 percent
 Xeric Torriorthents very gravelly sand, 2 to 8 percent slopes--5 percent
 Xeric Haplargids gravelly sandy loam, 8 to 15 percent slopes--5 percent

Component Description

Advokay and similar soils

Landform: Rock pediments
 Parent material: Colluvium derived from mixed rocks over residuum weathered from mixed rocks
 Typical vegetation: Bottlebrush squirreltail, shadscale, fourwing saltbush, galleta, desert needlegrass, black greasewood, Indian ricegrass, winterfat, bud sagebrush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 35 percent gravel
 Layer 1--0 to 3 inches; gravelly sandy loam
 Layer 2--3 to 7 inches; gravelly sandy clay loam
 Layer 3--7 to 11 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (paralithic): 4 to 14 inches
 Permeability class (root zone): Moderately slow
 Available water capacity: About 0.8 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Ardivey and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, bud sagebrush, spiny menodora, galleta, Cooper wolfberry, Indian ricegrass, black greasewood, bottlebrush squirreltail, winterfat

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 14 inches; very gravelly loam

Layer 3--14 to 60 inches; extremely gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Permeability class (root zone): Moderately slow

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY036NV--Cobbly Loam 5-8 P.Z.

Component Description

Leo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Fourwing saltbush, winterfat, spiny hopsage, galleta, Indian ricegrass, bud sagebrush

Typical profile:

Surface rock fragments: About 20 percent gravel

Layer 1--0 to 4 inches; gravelly sandy loam

Layer 2--4 to 60 inches; stratified gravelly fine sandy loam to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY046NV--Sandy Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Rock outcrop

Composition: 0 to 5 percent

Landform: Pediments

Ecological site: None assigned

Xeric Torriorthents and similar soils

Composition: 0 to 5 percent

Classification: Sandy-skeletal, mixed, mesic Xeric Torriorthents

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Rose, Indian ricegrass, Sandberg bluegrass, big sagebrush, desert peach, rubber rabbitbrush, turbinella oak, skunkbush sumac

Ecological site: 029XY009NV--Upland Wash

Xeric Haplargids and similar soils

Composition: 0 to 5 percent

Classification: Loamy, mixed, superactive, mesic, shallow Xeric Haplargids

Slope: 8 to 15 percent

Landform: Rock pediments

Typical vegetation: Winterfat, Nevada ephedra, spiny hopsage, Indian ricegrass, Douglas rabbitbrush, Wyoming big sagebrush, galleta, desert needlegrass

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2642--Advokay-Blacktop association

Map Unit Setting

MLRA: 29

Landscape: Hills

Elevation: 5,200 to 5,700

Precipitation: 4 to 8 inches

Air temperature: 52 to 55 degrees Fahrenheit

Frost-free period: 100 to 150 days

Composition

Advokay gravelly sandy loam, 4 to 15 percent slopes--65 percent

Blacktop very stony fine sandy loam, 15 to 30 percent slopes--20 percent

Izo very gravelly sand, 2 to 4 percent slopes--8 percent

Unsel gravelly sandy loam, 2 to 8 percent slopes--7 percent

Component Description**Advokay and similar soils**

Landform: Hills

Parent material: Colluvium derived from mixed rocks over residuum weathered from mixed rocks

Typical vegetation: Fourwing saltbush, shadscale, galleta, Indian ricegrass, black greasewood, bud sagebrush, desert needlegrass, winterfat, bottlebrush squirreltail

Typical profile:

Surface rock fragments: About 2 percent cobbles, 35 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 7 inches; gravelly sandy clay loam

Layer 3--7 to 11 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (paralithic): 4 to 14 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 0.8 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description**Blacktop and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Horsebrush, Indian ricegrass, Cooper wolfberry, Nevada dalea, shadscale, bud sagebrush, black greasewood

Typical profile:

Surface rock fragments: About 15 percent stones, 10 percent cobbles, 35 percent gravel

Layer 1--0 to 7 inches; very stony fine sandy loam

Layer 2--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 10 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.4 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7e

Ecological site: 029XY033NV--Sodic Hill 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Izo and similar soils**

Composition: 0 to 8 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Nevada ephedra, Indian ricegrass, littleleaf horsebrush, Cooper wolfberry, spiny hopsage, burrobrush, fourwing saltbush, rubber rabbitbrush

Ecological site: 029XY041NV--Dry Wash

Unsel and similar soils

Composition: 0 to 7 percent

Slope: 2 to 8 percent

Landform: Alluvial fans

Typical vegetation: Desert needlegrass, Nevada ephedra, winterfat, galleta, shadscale, fourwing saltbush, bud sagebrush, Indian ricegrass, black greasewood, bottlebrush squirreltail

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2650--Luning-Wardenot-Izo association

Map Unit Setting

MLRA: 29
 Landscape: Fan piedmont
 Elevation: 4,500 to 5,400
 Precipitation: 3 to 8 inches
 Air temperature: 50 to 57 degrees Fahrenheit
 Frost-free period: 120 to 150 days

Composition

Luning loamy sand, 0 to 2 percent slopes--40 percent
 Wardenot gravelly sandy loam, 0 to 2 percent slopes--30 percent
 Izo very gravelly sand, 0 to 2 percent slopes--20 percent
 Leo very gravelly sand, 4 to 8 percent slopes--5 percent
 Ardivay very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Luning and similar soils

Landform: Fan aprons
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Bottlebrush squirreltail, Cooper wolfberry, Indian ricegrass, fourwing saltbush

Typical profile:

Layer 1--0 to 3 inches; loamy sand
 Layer 2--3 to 60 inches; stratified sandy loam to very gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Negligible
 Permeability class (root zone): Rapid
 Available water capacity: About 3 inches
 Present flooding: Rare
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 029XY034NV--Sandy 3-5 P.Z.

Component Description

Wardenot and similar soils

Landform: Fan aprons
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Bud sagebrush, fourwing saltbush, shadscale, winterfat, galleta, Indian ricegrass, black greasewood, desert needlegrass, bottlebrush squirreltail

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel
 Layer 1--0 to 5 inches; gravelly sandy loam
 Layer 2--5 to 60 inches; stratified very gravelly fine sandy loam to extremely cobbly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: Rare
 Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Izo and similar soils

Landform: Drainageways
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Rubber rabbitbrush, fourwing saltbush, spiny hopsage, burrobrush, Cooper wolfberry, Indian ricegrass, Nevada ephedra, littleleaf horsebrush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel
 Layer 1--0 to 8 inches; very gravelly sand
 Layer 2--8 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Negligible
 Permeability class (root zone): Rapid
 Available water capacity: About 2 inches
 Present flooding: Occasional
 Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w
 Ecological site: 029XY041NV

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Leo and similar soils**

Composition: 0 to 5 percent
 Slope: 4 to 8 percent
 Landform: Inset fans
 Typical vegetation: Bottlebrush squirreltail, galleta, shadscale, bud sagebrush, winterfat, Indian ricegrass
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Ardivey and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 4 percent
 Landform: Fan remnants
 Typical vegetation: Shadscale, winterfat, Nevada ephedra, galleta, Cooper wolfberry, spiny menodora, Indian ricegrass, black greasewood, bottlebrush squirreltail, desert needlegrass, bud sagebrush
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2660--Stonell-Wardenot-Izo association***Map Unit Setting***

MLRA: 29
 Landscape: Fan piedmont
 Elevation: 4,700 to 5,300
 Precipitation: 4 to 8 inches
 Air temperature: 52 to 57 degrees Fahrenheit
 Frost-free period: 120 to 150 days

Composition

Stonell gravelly sandy loam, 2 to 8 percent slopes--35 percent
 Wardenot very gravelly sandy loam, 2 to 8 percent slopes--30 percent
 Izo very gravelly sand, 0 to 4 percent slopes--20 percent
 Vigus gravelly sandy loam, 2 to 4 percent slopes--10 percent
 Wardenot very gravelly loamy sand, 0 to 2 percent slopes--5 percent

Component Description**Stonell and similar soils**

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Littleleaf horsebrush, desert needlegrass, bud sagebrush, shadscale, Indian ricegrass, Anderson wolfberry, galleta, winterfat, Nevada ephedra, Nevada dalea

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 55 percent gravel
 Layer 1--0 to 3 inches; gravelly sandy loam
 Layer 2--3 to 8 inches; very gravelly sandy clay loam
 Layer 3--8 to 60 inches; stratified very gravelly sandy loam to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: High
 Permeability class (root zone): Moderately slow
 Salinity: Saline within 40 inches
 Available water capacity: About 3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description**Wardenot and similar soils**

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Black greasewood, Indian ricegrass, galleta, winterfat, shadscale, bud

sagebrush, bottlebrush squirreltail, desert needlegrass, fourwing saltbush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 5 inches; very gravelly sandy loam

Layer 2--5 to 60 inches; stratified very gravelly fine sandy loam to extremely cobbly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: Rare

Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Izo and similar soils

Landform: Drainageways

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Nevada ephedra, fourwing saltbush, littleleaf horsebrush, Indian ricegrass, Cooper wolfberry, burrobrush, spiny hopsage, rubber rabbitbrush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel

Layer 1--0 to 8 inches; very gravelly sand

Layer 2--8 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Negligible

Permeability class (root zone): Rapid

Available water capacity: About 2 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 029XY041NV--Dry Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Vigus and similar soils

Composition: 0 to 10 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Shadscale, bud sagebrush, Nevada ephedra, desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass, galleta, winterfat

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Wardenot and similar soils

Composition: 0 to 5 percent

Slope: 0 to 2 percent

Landform: Fan remnants

Typical vegetation: Fourwing saltbush, desert needlegrass, black greasewood, winterfat, bud sagebrush, Indian ricegrass, bottlebrush squirreltail, galleta, shadscale

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2670--Ardivey-Izo association

Map Unit Setting

MLRA: 29

Landscape: Fan piedmont

Elevation: 5,400 to 5,900

Precipitation: 4 to 8 inches

Air temperature: 46 to 57 degrees Fahrenheit

Frost-free period: 120 to 140 days

Composition

Ardivey very gravelly sandy loam, 2 to 8 percent slopes--65 percent

Izo very gravelly sand, 2 to 4 percent slopes--20 percent

Unsel gravelly sandy loam, 2 to 8 percent slopes--5 percent

Leo gravelly sandy loam, 0 to 2 percent slopes--5 percent

Vigus gravelly sandy loam, 2 to 8 percent slopes--5 percent

Component Description

Ardivey and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, bottlebrush squirreltail, black greasewood, winterfat, galleta, Cooper wolfberry, spiny menodora, Indian ricegrass, Nevada ephedra, bud sagebrush, shadscale

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 14 inches; very gravelly loam

Layer 3--14 to 60 inches; extremely gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Permeability class (root zone): Moderately slow

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Izo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, Cooper wolfberry, littleleaf horsebrush, burrobrush, spiny hopsage, Nevada ephedra, rubber rabbitbrush, fourwing saltbush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel

Layer 1--0 to 8 inches; very gravelly sand

Layer 2--8 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Negligible

Permeability class (root zone): Rapid

Available water capacity: About 2 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 029XY041NV--Dry Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Unsel and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Black greasewood, bottlebrush squirreltail, desert needlegrass, galleta, winterfat, Indian ricegrass, Nevada ephedra, shadscale, fourwing saltbush, bud sagebrush

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Leo and similar soils

Composition: 0 to 5 percent

Slope: 0 to 2 percent

Landform: Fan skirts

Typical vegetation: Spiny hopsage, winterfat, fourwing saltbush, bud sagebrush, Indian ricegrass, galleta

Ecological site: 029XY046NV--Sandy Loam 5-8 P.Z.

Vigus and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Black greasewood, Indian ricegrass, desert needlegrass, bottlebrush squirreltail, bud sagebrush, galleta, winterfat, Nevada ephedra, shadscale

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2671--Ardivey-Stonell-Izo association

Map Unit Setting

MLRA: 29

Landscape: Fan piedmont

Elevation: 5,000 to 5,400

Precipitation: 4 to 8 inches

Air temperature: 46 to 55 degrees Fahrenheit

Frost-free period: 120 to 150 days

Composition

Ardivey very gravelly sandy loam, 2 to 4 percent slopes--45 percent

Stonell gravelly sandy loam, 2 to 4 percent slopes--20 percent

Izo very gravelly sand, 0 to 4 percent slopes--20 percent

Typic Haplocalcids very gravelly loamy sand, 2 to 8 percent slopes--8 percent

Leo gravelly sandy loam, 2 to 4 percent slopes--5 percent

Tokoper very cobbly sandy loam, 2 to 8 percent slopes--2 percent

Component Description

Ardivey and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, bottlebrush squirreltail, black greasewood, spiny menodora, Cooper wolfberry, galleta, winterfat, Nevada ephedra, shadscale, bud sagebrush, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 14 inches; very gravelly loam

Layer 3--14 to 60 inches; extremely gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Stonell and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, Anderson wolfberry, Nevada dalea, shadscale, littleleaf horsebrush, desert needlegrass, galleta, winterfat, Nevada ephedra, bud sagebrush

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 8 inches; very gravelly sandy clay loam

Layer 3--8 to 60 inches; stratified very gravelly sandy loam to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Izo and similar soils

Landform: Drainageways

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Nevada ephedra, spiny hopsage, rubber rabbitbrush, fourwing saltbush, burrobrush,

Cooper wolfberry, Indian ricegrass, littleleaf horsebrush

Typical profile:

Surface rock fragments: About 50 percent gravel, 3 percent cobbles

Layer 1--0 to 8 inches; very gravelly sand

Layer 2--8 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Negligible

Permeability class (root zone): Rapid

Available water capacity: About 2 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 029XY041NV--Dry Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Typic Haplocalcids and similar soils

Composition: 0 to 8 percent

Classification: Sandy-skeletal, mixed, mesic Typic Haplocalcids

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Bud sagebrush, desert needlegrass, galleta, Indian ricegrass, shadscale, Anderson wolfberry, Nevada ephedra, winterfat, Nevada dalea, littleleaf horsebrush

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Leo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: Littleleaf horsebrush, Nevada ephedra, bud sagebrush, desert needlegrass, galleta, Indian ricegrass, spiny hopsage, Anderson wolfberry
Ecological site: 029XY016NV--Loamy Upland 5-8 P.Z.

Tokoper and similar soils

Composition: 0 to 2 percent

Slope: 2 to 8 percent

Landform: Rock pediments

Typical vegetation: Spiny horsebrush, black greasewood, desert needlegrass, shadscale, Indian ricegrass, spiny menodora, wolfberry, galleta, Nevada ephedra

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2680--Espint-Vindicator association

Map Unit Setting

MLRA: 29

Landscape: Hills

Elevation: 5,500 to 6,300

Precipitation: 6 to 10 inches

Air temperature: 46 to 52 degrees Fahrenheit

Frost-free period: 120 to 150 days

Composition

Espint very gravelly fine sandy loam, 15 to 50 percent slopes--35 percent

Vindicator very gravelly sandy loam, 15 to 50 percent slopes--30 percent

Espint very gravelly fine sandy loam, 2 to 15 percent slopes--20 percent

Papoose gravelly loamy sand, 2 to 8 percent slopes--6 percent

Typic Torriorthents very gravelly sandy loam, 4 to 30 percent slopes--6 percent

Veet Family very gravelly sandy loam, 2 to 8 percent slopes--3 percent

Component Description

Espint and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Douglas rabbitbrush, Wyoming big sagebrush, Nevada ephedra, winterfat, spiny hopsage, galleta, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 1 inches; very gravelly fine sandy loam

Layer 2--1 to 7 inches; gravelly clay
 Layer 3--7 to 17 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (paralithic): 6 to 14 inches
 Permeability class (root zone): Slow
 Available water capacity: About 1.0 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description

Vindicator and similar soils

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Winterfat, Anderson wolfberry, galleta, spiny hopsage, Indian ricegrass, Nevada ephedra, Nevada dalea, fourwing saltbush, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 45 percent gravel
 Layer 1--0 to 2 inches; very gravelly sandy loam
 Layer 2--2 to 7 inches; very gravelly clay loam
 Layer 3--7 to 17 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (paralithic): 4 to 14 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.7 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY021NV--Loamy Hill 5-8 P.Z.

Component Description

Espint and similar soils

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Desert needlegrass, Indian ricegrass, galleta, spiny hopsage, winterfat, Nevada ephedra, Douglas rabbitbrush, Wyoming big sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel
 Layer 1--0 to 1 inches; very gravelly fine sandy loam
 Layer 2--1 to 7 inches; gravelly clay
 Layer 3--7 to 17 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (paralithic): 6 to 14 inches
 Permeability class (root zone): Slow
 Available water capacity: About 1.0 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Papoose and similar soils

Composition: 0 to 6 percent
 Slope: 2 to 8 percent
 Landform: Fan remnants
 Typical vegetation: Galleta, winterfat, bud sagebrush, shadscale, bottlebrush squirreltail, Indian ricegrass
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Typic Torriorthents and similar soils

Composition: 0 to 6 percent
 Classification: Loamy-skeletal, mixed, superactive, calcareous, mesic, shallow Typic Torriorthents

Slope: 4 to 30 percent

Landform: Hills

Typical vegetation: Anderson wolfberry, desert needlegrass, Indian ricegrass, fourwing saltbush, galleta, spiny hopsage, winterfat, Nevada ephedra, Nevada dalea

Ecological site: 029XY021NV--Loamy Hill 5-8 P.Z.

Veet Family and similar soils

Composition: 0 to 3 percent

Classification: Loamy-skeletal, mixed, superactive, mesic Xeric Haplocambids

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Nevada ephedra, fourwing saltbush, Indian ricegrass, galleta, Wyoming big sagebrush, spiny hopsage, desert needlegrass

Ecological site: 029XY006NV--Loamy 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2681--Espint-Stewval-Vindicator association

Map Unit Setting

MLRA: 29

Landscape: Mountains

Elevation: 5,900 to 6,500

Precipitation: 6 to 10 inches

Air temperature: 45 to 52 degrees Fahrenheit

Frost-free period: 100 to 140 days

Composition

Espint very gravelly fine sandy loam, 15 to 50 percent slopes--40 percent

Stewval very gravelly fine sandy loam, 15 to 50 percent slopes--30 percent

Vindicator very gravelly sandy loam, 30 to 50 percent slopes--15 percent

Xeric Torriorthents very gravelly sandy loam, 8 to 30 percent slopes--8 percent

Rock outcrop--4 percent

Blacktop very stony fine sandy loam, 30 to 75 percent slopes--3 percent

Component Description

Espint and similar soils

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Indian ricegrass, Douglas rabbitbrush, desert needlegrass, galleta, spiny hopsage, winterfat, Nevada ephedra, Wyoming big sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 1 inches; very gravelly fine sandy loam

Layer 2--1 to 7 inches; gravelly clay

Layer 3--7 to 17 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (paralithic): 6 to 14 inches

Permeability class (root zone): Slow

Available water capacity: About 1.0 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description

Stewval and similar soils

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Galleta, winterfat, Nevada ephedra, black sagebrush, needlegrass, Indian ricegrass, bluegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 55 percent gravel

Layer 1--0 to 1 inches; very gravelly fine sandy loam

Layer 2--1 to 7 inches; very gravelly loam

Layer 3--7 to 11 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY014NV--Shallow Calcareous Slope 8-12 P.Z.

Component Description

Vindicator and similar soils

Landform: Mountains
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Fourwing saltbush, Nevada dalea, Nevada ephedra, winterfat, spiny hopsage, galleta, Anderson wolfberry, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 45 percent gravel
 Layer 1--0 to 2 inches; very gravelly sandy loam
 Layer 2--2 to 7 inches; very gravelly clay loam
 Layer 3--7 to 17 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (paralithic): 4 to 14 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.7 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY021NV--Loamy Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Xeric Torriorthents and similar soils

Composition: 0 to 8 percent

Classification: Loamy-skeletal, mixed, superactive, calcareous, mesic, shallow Xeric Torriorthents
 Slope: 8 to 30 percent
 Landform: Mountains
 Typical vegetation: Desert needlegrass, galleta, winterfat, spiny hopsage, Nevada ephedra, Douglas rabbitbrush, Indian ricegrass, Wyoming big sagebrush
 Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Rock outcrop

Composition: 0 to 4 percent
 Landform: Mountains
 Ecological site: None assigned

Blacktop and similar soils

Composition: 0 to 3 percent
 Slope: 30 to 75 percent
 Landform: Mountains
 Typical vegetation: Shadscale, bud sagebrush, galleta, Indian ricegrass, winterfat
 Ecological site: 029XY022NV--Loamy Slope 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2682--Espint-Gabbvally-Stewval association

Map Unit Setting

MLRA: 29
 Landscape: Mountains
 Elevation: 5,900 to 6,500
 Precipitation: 8 to 10 inches
 Air temperature: 45 to 54 degrees Fahrenheit
 Frost-free period: 110 to 140 days

Composition

Espint very gravelly fine sandy loam, 15 to 50 percent slopes--30 percent
 Gabbvally very gravelly sandy loam, 15 to 50 percent slopes--30 percent
 Stewval very gravelly fine sandy loam, 15 to 50 percent slopes--25 percent
 Wahguyhe very gravelly sandy loam, 30 to 75 percent slopes--7 percent
 Pintwater very gravelly fine sandy loam, 30 to 75 percent slopes--5 percent
 Downeyville very gravelly fine sandy loam, 15 to 30 percent slopes--3 percent

Component Description**Espint and similar soils**

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Winterfat, galleta, Nevada ephedra, Wyoming big sagebrush, spiny hopsage, Douglas rabbitbrush, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 1 inches; very gravelly fine sandy loam

Layer 2--1 to 7 inches; gravelly clay

Layer 3--7 to 17 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (paralithic): 6 to 14 inches

Permeability class (root zone): Slow

Available water capacity: About 1.0 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description**Gabbvally and similar soils**

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Bottlebrush squirreltail, other perennial forbs, Indian ricegrass, galleta, desert needlegrass, Douglas rabbitbrush, Wyoming big sagebrush, spiny hopsage, winterfat, Nevada ephedra

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 12 inches; very gravelly loam

Layer 3--12 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description**Stewval and similar soils**

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Bluegrass, Indian ricegrass, needlegrass, galleta, winterfat, black sagebrush, Nevada ephedra

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 55 percent gravel

Layer 1--0 to 1 inches; very gravelly fine sandy loam

Layer 2--1 to 7 inches; very gravelly loam

Layer 3--7 to 11 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.5 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY014NV--Shallow Calcareous Slope 8-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Wahguyhe and similar soils

Composition: 0 to 7 percent

Slope: 30 to 75 percent

Landform: Mountains

Typical vegetation: Winterfat, desert needlegrass, Indian ricegrass, galleta, Nevada ephedra, Wyoming big sagebrush, bud sagebrush, fourwing saltbush
Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Pintwater and similar soils

Composition: 0 to 5 percent

Slope: 30 to 75 percent

Landform: Mountains

Typical vegetation: Nevada dalea, shadscale, black greasewood, Indian ricegrass, bud sagebrush, Cooper wolfberry, horsebrush
Ecological site: 029XY033NV--Sodic Hill 3-5 P.Z.

Downeyville and similar soils

Composition: 0 to 3 percent

Slope: 15 to 30 percent

Landform: Mountains

Typical vegetation: Indian ricegrass, galleta, desert needlegrass, bottlebrush squirreltail, black greasewood, spiny menodora, bud sagebrush, winterfat, Nevada ephedra, dalea, shadscale
Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2690--Leo-Izo association

Map Unit Setting

MLRA: 29

Landscape: Fan piedmont

Elevation: 5,200 to 5,600

Precipitation: 4 to 8 inches

Air temperature: 50 to 54 degrees Fahrenheit

Frost-free period: 110 to 130 days

Composition

Leo gravelly sandy loam, 2 to 4 percent slopes--55 percent

Izo very gravelly sand, 2 to 4 percent slopes--35 percent

Vigus gravelly sandy loam, 2 to 4 percent slopes--10 percent

Component Description

Leo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Galleta, Indian ricegrass, spiny hopsage, winterfat, bud sagebrush, fourwing saltbush

Typical profile:

Surface rock fragments: About 20 percent gravel

Layer 1--0 to 4 inches; gravelly sandy loam

Layer 2--4 to 60 inches; stratified gravelly fine sandy loam to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY046NV--Sandy Loam 5-8 P.Z.

Component Description

Izo and similar soils

Landform: Drainageways

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Rubber rabbitbrush, Nevada ephedra, spiny hopsage, burrobrush, Cooper wolfberry, Indian ricegrass, littleleaf horsebrush, fourwing saltbush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel

Layer 1--0 to 8 inches; very gravelly sand

Layer 2--8 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Negligible
 Permeability class (root zone): Rapid
 Available water capacity: About 2 inches
 Present flooding: Occasional
 Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w
 Ecological site: 029XY041NV--Dry Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Vigus and similar soils**

Composition: 0 to 10 percent
 Slope: 2 to 4 percent
 Landform: Fan remnants
 Typical vegetation: Nevada ephedra, winterfat, shadscale, Indian ricegrass, black greasewood, bottlebrush squirreltail, bud sagebrush, galleta, desert needlegrass
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2701--Cobatus loam, drained, 0 to 2 percent slopes***Map Unit Setting***

MLRA: 30
 Landscape: Bolson
 Elevation: 3,900 to 4,000
 Precipitation: 4 to 8 inches
 Air temperature: 57 to 63 degrees Fahrenheit
 Frost-free period: 180 to 220 days

Composition

Cobatus loam, 0 to 2 percent slopes--90 percent
 Cobatus loam, 2 to 4 percent slopes--10 percent

Component Description**Cobatus and similar soils**

Landform: Lake plains
 Parent material: Alluvium derived from mixed rocks over lacustrine deposits

Typical vegetation: Bottlebrush squirreltail, black greasewood, Indian ricegrass, bud sagebrush, shadscale

Typical profile:

Layer 1--0 to 2 inches; loam
 Layer 2--2 to 14 inches; loam
 Layer 3--14 to 60 inches; loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Medium
 Permeability class (root zone): Moderately slow
 Salinity: Saline within 40 inches
 Sodicity: Sodic within 40 inches
 Available water capacity: About 11 inches
 Present flooding: None
 Water table: Present
 Natural drainage class: Somewhat poorly drained

Interpretive Groups

Nonirrigated land capability: 7w
 Ecological site: 029XY024NV--Sodic Terrace 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Cobatus and similar soils**

Composition: 0 to 10 percent
 Slope: 2 to 4 percent
 Landform: Lake plains
 Typical vegetation: Baltic rush, shadscale, rubber rabbitbrush, seepweed, alkali sacaton, black greasewood, basin wildrye, inland saltgrass
 Ecological site: 029XY004NV--Saline Bottom

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2710--Papoose-Vindicator-Espint association***Map Unit Setting***

MLRA: 29
 Landscape: Fan piedmont

Elevation: 5,300 to 6,200
 Precipitation: 5 to 10 inches
 Air temperature: 46 to 57 degrees Fahrenheit
 Frost-free period: 120 to 150 days

Composition

Papoose gravelly loamy sand, 2 to 8 percent slopes--35 percent
 Vindicator very gravelly sandy loam, 2 to 15 percent slopes--35 percent
 Espint very gravelly fine sandy loam, 2 to 4 percent slopes--15 percent
 Typic Haplocambids gravelly sandy loam, 2 to 4 percent slopes--7 percent
 Veet Family very gravelly sandy loam, 2 to 4 percent slopes--6 percent
 Rock outcrop--2 percent

Component Description

Papoose and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Desert needlegrass, Indian ricegrass, Anderson wolfberry, galleta, spiny hopsage, littleleaf horsebrush, bud sagebrush, Nevada ephedra

Typical profile:

Surface rock fragments: About 1 percent cobbles, 45 percent gravel
 Layer 1--0 to 6 inches; gravelly loamy sand
 Layer 2--6 to 12 inches; gravelly sandy clay loam
 Layer 3--12 to 25 inches; very gravelly loam
 Layer 4--25 to 60 inches; stratified extremely gravelly sandy loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: High
 Permeability class (root zone): Moderately slow
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY016NV--Loamy Upland 5-8 P.Z.

Component Description

Vindicator and similar soils

Landform: Rock pediments
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Indian ricegrass, fourwing saltbush, Anderson wolfberry, Nevada dalea, Nevada ephedra, winterfat, spiny hopsage, desert needlegrass, galleta

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 45 percent gravel
 Layer 1--0 to 2 inches; very gravelly sandy loam
 Layer 2--2 to 7 inches; very gravelly clay loam
 Layer 3--7 to 17 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (paralithic): 4 to 14 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.7 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY021NV--Loamy Hill 5-8 P.Z.

Component Description

Espint and similar soils

Landform: Rock pediments
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Galleta, spiny hopsage, winterfat, Nevada ephedra, Douglas rabbitbrush, Indian ricegrass, Wyoming big sagebrush, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel
 Layer 1--0 to 1 inches; very gravelly fine sandy loam
 Layer 2--1 to 7 inches; gravelly clay
 Layer 3--7 to 17 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (paralithic): 6 to 14 inches

Permeability class (root zone): Slow

Available water capacity: About 1.0 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Typic Haplocambids and similar soils**

Composition: 0 to 7 percent

Classification: Loamy-skeletal, mixed, superactive, mesic Typic Haplocambids

Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: Littleleaf horsebrush, Nevada ephedra, bud sagebrush, Anderson wolfberry, desert needlegrass, Indian ricegrass, galleta, spiny hopsage

Ecological site: 029XY016NV--Loamy Upland 5-8 P.Z.

Veet Family and similar soils

Composition: 0 to 6 percent

Classification: Loamy-skeletal, mixed, superactive, mesic Xeric Haplocambids

Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: Spiny hopsage, Nevada ephedra, fourwing saltbush, Indian ricegrass, galleta, Wyoming big sagebrush, desert needlegrass

Ecological site: 029XY006NV--Loamy 8-10 P.Z.

Rock outcrop

Composition: 0 to 2 percent

Landform: Hills

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2720--Unsel-Stonell-Veet association***Map Unit Setting***

MLRA: 29

Landscape: Fan piedmont

Elevation: 5,300 to 5,900

Precipitation: 5 to 10 inches

Air temperature: 48 to 55 degrees Fahrenheit

Frost-free period: 110 to 140 days

Composition

Unsel gravelly sandy loam, 2 to 8 percent slopes--40 percent

Stonell gravelly sandy loam, 2 to 8 percent slopes--30 percent

Veet very gravelly sandy loam, 2 to 8 percent slopes--20 percent

Izo very gravelly sand, 2 to 8 percent slopes--10 percent

Component Description**Unsel and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Black greasewood, bud sagebrush, fourwing saltbush, shadscale, desert needlegrass, bottlebrush squirreltail, Indian ricegrass, galleta, winterfat, Nevada ephedra

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 55 percent gravel

Layer 1--0 to 7 inches; gravelly sandy loam

Layer 2--7 to 11 inches; gravelly clay loam

Layer 3--11 to 20 inches; gravelly sandy loam

Layer 4--20 to 60 inches; very gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Permeability class (root zone): Moderately slow

Sodicity: Sodic within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 3e

Nonirrigated land capability: 7c

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Stonell and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, Anderson wolfberry, galleta, winterfat, Nevada ephedra, Nevada dalea, desert needlegrass, littleleaf horsebrush, shadscale, bud sagebrush

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 55 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 8 inches; very gravelly sandy clay loam

Layer 3--8 to 60 inches; stratified very gravelly sandy loam to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Veet and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Wyoming big sagebrush, bud sagebrush, Nevada ephedra, needleandthread, desert needlegrass, bottlebrush squirreltail, Indian ricegrass, galleta, spiny hopsage, winterfat

Typical profile:

Surface rock fragments: About 1 percent cobbles, 50 percent gravel

Layer 1--0 to 5 inches; very gravelly sandy loam

Layer 2--5 to 20 inches; very gravelly sandy loam

Layer 3--20 to 60 inches; stratified extremely gravelly sandy loam to very gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Medium

Permeability class (root zone): Moderate

Available water capacity: About 3 inches

Present flooding: Rare

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY049NV--Sandy Loam 8-12 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Izo and similar soils

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Spiny hopsage, Nevada ephedra, burrobrush, fourwing saltbush, rubber rabbitbrush, littleleaf horsebrush, Cooper wolfberry, Indian ricegrass

Ecological site: 029XY041NV--Dry Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2730--Gabbvally-Blacktop-Espint association

Map Unit Setting

MLRA: 29

Landscape: Mountains

Elevation: 5,600 to 6,400

Precipitation: 6 to 10 inches

Air temperature: 46 to 54 degrees Fahrenheit

Frost-free period: 120 to 150 days

Composition

Gabbvally very gravelly sandy loam, 15 to 50 percent slopes--35 percent

Blacktop very stony fine sandy loam, 30 to 75 percent slopes--30 percent

Espint very gravelly fine sandy loam, 8 to 30 percent slopes--20 percent
 Advokay gravelly sandy loam, 8 to 30 percent slopes--10 percent
 Downeyville very gravelly sandy loam, 8 to 15 percent slopes--5 percent

Component Description

Gabbvally and similar soils

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Bottlebrush squirreltail, spiny hopsage, Wyoming big sagebrush, winterfat, desert needlegrass, other perennial forbs, Indian ricegrass, galleta, Nevada ephedra, Douglas rabbitbrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel
 Layer 1--0 to 4 inches; very gravelly sandy loam
 Layer 2--4 to 12 inches; very gravelly loam
 Layer 3--12 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 1.2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description

Blacktop and similar soils

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Cooper wolfberry, shadscale, bud sagebrush, black greasewood, Indian ricegrass, Nevada dalea, horsebrush

Typical profile:

Surface rock fragments: About 15 percent stones, 10 percent cobbles, 35 percent gravel

Layer 1--0 to 7 inches; very stony fine sandy loam
 Layer 2--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 10 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.4 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7e
 Ecological site: 029XY033NV--Sodic Hill 3-5 P.Z.

Component Description

Espint and similar soils

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Nevada ephedra, winterfat, spiny hopsage, galleta, Indian ricegrass, desert needlegrass, Douglas rabbitbrush, Wyoming big sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel
 Layer 1--0 to 1 inches; very gravelly fine sandy loam
 Layer 2--1 to 7 inches; gravelly clay
 Layer 3--7 to 17 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 30 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (paralithic): 6 to 14 inches
 Permeability class (root zone): Slow
 Available water capacity: About 1.0 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Advokay and similar soils

Composition: 0 to 10 percent

Slope: 8 to 30 percent

Landform: Mountains

Typical vegetation: Bottlebrush squirreltail, black greasewood, Indian ricegrass, galleta, winterfat, shadscale, fourwing saltbush, desert needlegrass, bud sagebrush

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Downeyville and similar soils

Composition: 0 to 5 percent

Slope: 8 to 15 percent

Landform: Mountains

Typical vegetation: Desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass, spiny menodora, galleta, winterfat, dalea, shadscale, bud sagebrush, Nevada ephedra

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2731--Gabbvally-Downeyville-Vindicator association

Map Unit Setting

MLRA: 29

Landscape: Hills

Elevation: 5,900 to 6,300

Precipitation: 4 to 10 inches

Air temperature: 46 to 55 degrees Fahrenheit

Frost-free period: 110 to 150 days

Composition

Gabbvally very gravelly sandy loam, 15 to 50 percent slopes--35 percent

Downeyville very gravelly fine sandy loam, 15 to 50 percent slopes--25 percent

Vindicator very gravelly sandy loam, 2 to 15 percent slopes--25 percent

Ardivey very gravelly sandy loam, 2 to 8 percent slopes--10 percent

Izo very gravelly sand, 2 to 8 percent slopes--5 percent

Component Description

Gabbvally and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Desert needlegrass, bottlebrush squirreltail, other perennial forbs, Indian ricegrass, galleta, spiny hopsage, winterfat, Nevada ephedra, Douglas rabbitbrush, Wyoming big sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 12 inches; very gravelly loam

Layer 3--12 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description

Downeyville and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Indian ricegrass, spiny menodora, galleta, winterfat, black greasewood, bottlebrush squirreltail, desert needlegrass, Nevada ephedra, dalea, bud sagebrush, shadscale

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam

Layer 2--4 to 9 inches; very gravelly loam

Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Vindicator and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Fourwing saltbush, Nevada dalea, Nevada ephedra, winterfat, spiny hopsage, galleta, Anderson wolfberry, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 45 percent gravel
Layer 1--0 to 2 inches; very gravelly sandy loam
Layer 2--2 to 7 inches; very gravelly clay loam
Layer 3--7 to 11 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (paralithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY021NV--Loamy Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Ardivay and similar soils

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Black greasewood, bottlebrush squirreltail, desert needlegrass, Cooper wolfberry, spiny menodora, Indian ricegrass, galleta, winterfat, shadscale, Nevada ephedra, bud sagebrush
Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Izo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Fourwing saltbush, burrobrush, spiny hopsage, Cooper wolfberry, littleleaf horsebrush, rubber rabbitbrush, Indian ricegrass, Nevada ephedra
Ecological site: 029XY041NV--Dry Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2732--Gabbvally-Tognoni-Downeyville association

Map Unit Setting

MLRA: 29

Landscape: Hills

Elevation: 5,600 to 6,000

Precipitation: 4 to 10 inches

Air temperature: 48 to 55 degrees Fahrenheit

Frost-free period: 100 to 140 days

Composition

Gabbvally very gravelly sandy loam, 15 to 50 percent slopes--40 percent

Tognoni gravelly fine sandy loam, 15 to 50 percent slopes--25 percent

Downeyville very gravelly fine sandy loam, 15 to 50 percent slopes--20 percent

Tomel very gravelly sandy loam, 8 to 15 percent slopes--10 percent

Pintwater very gravelly fine sandy loam, 30 to 75 percent slopes--5 percent

Component Description**Gabbvally and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Other perennial forbs, desert needlegrass, bottlebrush squirreltail, Indian ricegrass, galleta, spiny hopsage, winterfat, Nevada ephedra, Douglas rabbitbrush, Wyoming big sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 12 inches; very gravelly loam

Layer 3--12 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description**Tognoni and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Bottlebrush squirreltail, black greasewood, winterfat, bud sagebrush, shadscale, desert needlegrass, Indian ricegrass, spiny menodora, galleta, Nevada ephedra, dalea

Typical profile:

Surface rock fragments: About 2 percent stones, 5 percent cobbles, 50 percent gravel

Layer 1--0 to 4 inches; gravelly fine sandy loam

Layer 2--4 to 14 inches; very cobbly clay loam

Layer 3--14 to 24 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 5 to 14 inches

Permeability class (root zone): Slow

Available water capacity: About 1.4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description**Downeyville and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Nevada ephedra, dalea, shadscale, bud sagebrush, black greasewood, winterfat, desert needlegrass, galleta, spiny menodora, bottlebrush squirreltail, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam

Layer 2--4 to 9 inches; very gravelly loam

Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Tomel and similar soils

Composition: 0 to 10 percent

Slope: 8 to 15 percent

Landform: Fan remnants

Typical vegetation: Black greasewood, galleta, spiny menodora, winterfat, Nevada ephedra, dalea, bud sagebrush, shadscale, bottlebrush squirreltail, desert needlegrass, Indian ricegrass

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Pintwater and similar soils

Composition: 0 to 5 percent

Slope: 30 to 75 percent

Landform: Hills

Typical vegetation: Cooper wolfberry, horsebrush, bud sagebrush, Indian ricegrass, black greasewood, Nevada dalea, shadscale

Ecological site: 029XY033NV--Sodic Hill 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2734--Gabbvally-Downeyville association

Map Unit Setting

MLRA: 29

Landscape: Hills

Elevation: 5,500 to 6,100

Precipitation: 4 to 10 inches

Air temperature: 48 to 55 degrees Fahrenheit

Frost-free period: 110 to 140 days

Composition

Gabbvally very gravelly sandy loam, 30 to 50 percent slopes--70 percent

Downeyville very gravelly fine sandy loam, 30 to 50 percent slopes--20 percent

Pintwater very gravelly fine sandy loam, 30 to 50 percent slopes--7 percent

Rock outcrop--3 percent

Component Description

Gabbvally and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Indian ricegrass, winterfat, Nevada ephedra, Douglas rabbitbrush, Wyoming big sagebrush, spiny hopsage, galleta, other perennial forbs, bottlebrush squirreltail, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 12 inches; very gravelly loam

Layer 3--12 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description

Downeyville and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Galleta, spiny menodora, desert needlegrass, black greasewood, Anderson wolfberry, Nevada ephedra, shadscale, bud sagebrush, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam

Layer 2--4 to 9 inches; very gravelly loam

Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY037NV--Cobbly Slope 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Pintwater and similar soils**

Composition: 0 to 7 percent

Slope: 30 to 50 percent

Landform: Hills

Typical vegetation: Black greasewood, Nevada ephedra, galleta, winterfat, spiny menodora, Indian ricegrass, bottlebrush squirreltail, desert needlegrass, bud sagebrush, shadscale, dalea

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Rock outcrop

Composition: 0 to 3 percent

Landform: Hills

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2735--Gabbvally-Wahguyhe-Rock outcrop association***Map Unit Setting***

MLRA: 29

Landscape: Mountains

Elevation: 6,500 to 7,800

Precipitation: 8 to 10 inches

Air temperature: 50 to 57 degrees Fahrenheit

Frost-free period: 100 to 140 days

Composition

Gabbvally very gravelly sandy loam, 15 to 50 percent slopes--45 percent

Wahguyhe very gravelly sandy loam, 30 to 75 percent slopes--25 percent

Rock outcrop--15 percent

Stewval very stony fine sandy loam, 15 to 50 percent slopes--8 percent

Downeyville very gravelly sandy loam, 15 to 50 percent slopes--5 percent

Veet very gravelly sandy loam, 2 to 15 percent slopes--2 percent

Component Description**Gabbvally and similar soils**

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Bottlebrush squirreltail, desert needlegrass, other perennial forbs, winterfat, Nevada ephedra, Douglas rabbitbrush, Wyoming big sagebrush, spiny hopsage, galleta, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 12 inches; very gravelly loam

Layer 3--12 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description**Wahguyhe and similar soils**

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Indian ricegrass, winterfat, fourwing saltbush, bud sagebrush, desert needlegrass, galleta, Nevada ephedra, Wyoming big sagebrush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam

Layer 2--2 to 16 inches; very gravelly sandy loam

Layer 3--16 to 20 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 14 to 20 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 1.1 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7e

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description

Rock outcrop

Landform: Mountains

Component Properties and Qualities

Slope: 15 to 75

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Stewval and similar soils

Composition: 0 to 8 percent

Slope: 15 to 50 percent

Landform: Mountains

Typical vegetation: Galleta, bluegrass, winterfat, needlegrass, black sagebrush, Indian ricegrass, Nevada ephedra

Ecological site: 029XY014NV--Shallow Calcareous Slope 8-12 P.Z.

Downeyville and similar soils

Composition: 0 to 5 percent

Slope: 15 to 50 percent

Landform: Mountains

Typical vegetation: Dalea, Nevada ephedra, shadscale, bud sagebrush, winterfat, galleta, spiny menodora, Indian ricegrass, black greasewood, bottlebrush squirreltail, desert needlegrass

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Veet and similar soils

Composition: 0 to 2 percent

Slope: 2 to 15 percent

Landform: Inset fans

Typical vegetation: Galleta, winterfat, spiny hopsage, Nevada ephedra, Douglas rabbitbrush, Wyoming big sagebrush, desert needlegrass, Indian ricegrass

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2736--Gabbvally-Brier-Rock outcrop association

Map Unit Setting

MLRA: 29

Landscape:

Elevation: 6,500 to 7,500

Precipitation: 8 to 14 inches

Air temperature: 46 to 54 degrees Fahrenheit

Frost-free period: 100 to 130 days

Composition

Gabbvally very gravelly sandy loam, 30 to 50 percent slopes--35 percent

Brier very cobbly loam, 30 to 50 percent slopes--35 percent

Rock outcrop--15 percent

Stewval very gravelly fine sandy loam, 30 to 75 percent slopes--6 percent

Xeric Torriorthents very gravelly sand, 2 to 15 percent slopes--6 percent

Espint very cobbly fine sandy loam, 15 to 50 percent slopes--3 percent

Component Description**Gabbvally and similar soils**

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Douglas rabbitbrush, Nevada ephedra, winterfat, spiny hopsage, galleta, Indian ricegrass, other perennial forbs, bottlebrush squirreltail, desert needlegrass, Wyoming big sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 12 inches; very gravelly loam

Layer 3--12 to 15 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 6 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description**Brier and similar soils**

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Green ephedra, Indian ricegrass, singleleaf pinyon, bluegrass, other perennial forbs, desert bitterbrush, Thurber needlegrass, Wyoming big sagebrush, curlleaf mountainmahogany, Douglas rabbitbrush, Utah juniper

Typical profile:

Surface rock fragments: About 2 percent stones, 20 percent cobbles, 30 percent gravel

Layer 1--0 to 4 inches; very cobbly loam

Layer 2--4 to 15 inches; very cobbly clay loam

Layer 3--15 to 19 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 14 to 20 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 1.3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY065NV--Pimo-Juos Wsg: Or2

Component Description**Rock outcrop**

Landform: Mountains

Component Properties and Qualities

Slope: 30 to 50

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Stewval and similar soils**

Composition: 0 to 6 percent

Slope: 30 to 75 percent

Landform: Mountains

Typical vegetation: Bluegrass, black sagebrush, Indian ricegrass, Nevada ephedra, needlegrass, winterfat, galleta

Ecological site: 029XY014NV--Shallow Calcareous

Slope 8-12 P.Z.

Xeric Torriorthents and similar soils

Composition: 0 to 6 percent

Classification: Sandy-skeletal, mixed, mesic Xeric Torriorthents

Slope: 2 to 15 percent

Landform: Drainageways

Typical vegetation: Indian ricegrass, skunkbush sumac, Sandberg bluegrass, rose, big sagebrush, desert peach, rubber rabbitbrush, turbinella oak

Ecological site: 029XY009NV--Upland Wash

Espint and similar soils

Composition: 0 to 3 percent

Slope: 15 to 50 percent

Landform: Mountains

Typical vegetation: Winterfat, spiny hopsage, Nevada ephedra, bottlebrush squirreltail, Douglas rabbitbrush, galleta, desert needlegrass, Indian ricegrass, Wyoming big sagebrush, other perennial forbs
Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Forest land" section

"Engineering" and "Soil Properties" sections

2740--Tognoni-Blacktop association

Map Unit Setting

MLRA: 29

Landscape: Mountains

Elevation: 5,500 to 5,900

Precipitation: 5 to 8 inches

Air temperature: 50 to 54 degrees Fahrenheit

Frost-free period: 120 to 150 days

Composition

Tognoni gravelly fine sandy loam, 4 to 30 percent slopes--65 percent
Blacktop very gravelly sandy loam, 30 to 75 percent slopes--20 percent
Stonell Family gravelly sandy loam, 0 to 4 percent slopes--9 percent
Rock outcrop--3 percent
Izo very gravelly sand, 4 to 8 percent slopes--3 percent

Component Description

Tognoni and similar soils

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Black greasewood, bottlebrush squirreltail, winterfat, desert needlegrass, dalea, spiny menodora, Indian ricegrass, Nevada ephedra, galleta, shadscale, bud sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 5 percent cobbles, 50 percent gravel
Layer 1--0 to 4 inches; gravelly fine sandy loam
Layer 2--4 to 14 inches; very cobbly clay loam
Layer 3--14 to 24 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 30 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 5 to 14 inches

Permeability class (root zone): Slow

Available water capacity: About 1.4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Blacktop and similar soils

Landform: Mountains

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Bud sagebrush, shadscale, Nevada dalea, Cooper wolfberry, Indian ricegrass, black greasewood, horsebrush

Typical profile:

Surface rock fragments: About 5 percent stones, 20 percent cobbles, 40 percent gravel
Layer 1--0 to 7 inches; very gravelly sandy loam
Layer 2--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 10 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.5 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7e

Ecological site: 029XY033NV

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Stonell Family and similar soils**

Composition: 0 to 9 percent

Classification: Loamy-skeletal, mixed, superactive, mesic Typic Haplargids

Slope: 0 to 4 percent

Landform: Summits of mountains

Typical vegetation: Bud sagebrush, desert needlegrass, littleleaf horsebrush, shadscale, Nevada dalea, Nevada ephedra, winterfat, galleta, Anderson wolfberry, Indian ricegrass

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Rock outcrop

Composition: 0 to 3 percent

Landform: Mountains

Ecological site: None assigned

Izo and similar soils

Composition: 0 to 3 percent

Slope: 4 to 8 percent

Landform: Drainageways

Typical vegetation: Indian ricegrass, burrobrush, Nevada ephedra, spiny hopsage, Cooper wolfberry, littleleaf horsebrush, rubber rabbitbrush, fourwing saltbush

Ecological site: 029XY041NV--Dry Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2741--Blacktop-Downeyville-Tognoni association***Map Unit Setting***

MLRA: 29

Landscape: Hills

Elevation: 5,300 to 5,900

Precipitation: 4 to 8 inches

Air temperature: 48 to 55 degrees Fahrenheit

Frost-free period: 110 to 150 days

Composition

Blacktop very stony fine sandy loam, 30 to 75 percent slopes--50 percent

Downeyville very gravelly fine sandy loam, 15 to 50 percent slopes--20 percent

Tognoni very cobbly fine sandy loam, 15 to 50 percent slopes--20 percent

Unsel gravelly sandy loam, 2 to 8 percent slopes--6 percent

Izo very gravelly sand, 2 to 8 percent slopes--3 percent

Leo fine sand, 2 to 8 percent slopes--1 percent

Component Description**Blacktop and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Indian ricegrass, bud sagebrush, shadscale, horsebrush, black greasewood, Cooper wolfberry, Nevada dalea

Typical profile:

Surface rock fragments: About 15 percent stones, 10 percent cobbles, 35 percent gravel

Layer 1--0 to 7 inches; very stony fine sandy loam

Layer 2--7 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 10 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.4 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7e

Ecological site: 029XY033NV--Sodic Hill 3-5 P.Z.

Component Description**Downeyville and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
Typical vegetation: Bottlebrush squirreltail, black greasewood, Indian ricegrass, spiny menodora, galleta, winterfat, desert needlegrass, dalea, shadscale, bud sagebrush, Nevada ephedra

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 4 inches; very gravelly fine sandy loam
 Layer 2--4 to 9 inches; very gravelly loam
 Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 0.7 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description**Tognoni and similar soils**

Landform: Hills
 Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks
 Typical vegetation: Spiny menodora, desert needlegrass, dalea, shadscale, bud sagebrush, Nevada ephedra, winterfat, galleta, black greasewood, bottlebrush squirreltail, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent stones, 20 percent cobbles, 40 percent gravel
 Layer 1--0 to 4 inches; very cobbly fine sandy loam
 Layer 2--4 to 14 inches; very cobbly clay loam
 Layer 3--14 to 24 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 5 to 14 inches
 Permeability class (root zone): Slow
 Available water capacity: About 1.4 inches
 Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Unsel and similar soils**

Composition: 0 to 6 percent
 Slope: 2 to 8 percent
 Landform: Alluvial fans
 Typical vegetation: Black greasewood, winterfat, Nevada ephedra, shadscale, fourwing saltbush, bud sagebrush, Indian ricegrass, galleta, bottlebrush squirreltail, desert needlegrass
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Izo and similar soils

Composition: 0 to 3 percent
 Slope: 2 to 8 percent
 Landform: Drainageways
 Typical vegetation: Indian ricegrass, littleleaf horsebrush, rubber rabbitbrush, fourwing saltbush, burrobrush, Nevada ephedra, spiny hopsage, Cooper wolfberry
 Ecological site: 029XY041NV--Dry Wash

Leo and similar soils

Composition: 0 to 1 percent
 Slope: 2 to 8 percent
 Landform: Sand sheets
 Typical vegetation: Winterfat, fourwing saltbush, needleandthread, Indian ricegrass, sand dropseed
 Ecological site: 029XY012NV--Sandy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2750--Silverbow-Wardenot-Izo association***Map Unit Setting***

MLRA: 29
 Landscape: Fan piedmont
 Elevation: 5,300 to 5,600

Precipitation: 4 to 8 inches
 Air temperature: 46 to 57 degrees Fahrenheit
 Frost-free period: 100 to 150 days

Composition

Silverbow gravelly sandy loam, 2 to 8 percent slopes--50 percent
 Wardenot very gravelly loamy sand, 2 to 8 percent slopes--20 percent
 Izo very gravelly sand, 2 to 4 percent slopes--15 percent
 Unsel gravelly sandy loam, 2 to 8 percent slopes--7 percent
 Typic Haplocambids gravelly sandy loam, 8 to 30 percent slopes--5 percent
 Tognoni very cobbly fine sandy loam, 8 to 30 percent slopes--3 percent

Component Description

Silverbow and similar soils

Landform: Fan remnants
 Parent material: Alluvium and colluvium derived from volcanic rocks
 Typical vegetation: Littleleaf horsebrush, black greasewood, Indian ricegrass, spiny menodora, Anderson wolfberry, galleta, winterfat, bud sagebrush, Nevada ephedra, shadscale, desert needlegrass

Typical profile:

Surface rock fragments: About 5 percent stones, 15 percent cobbles, 45 percent gravel
 Layer 1--0 to 2 inches; gravelly sandy loam
 Layer 2--2 to 10 inches; very cobbly clay loam
 Layer 3--10 to 18 inches; indurated
 Layer 4--18 to 40 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Permeability class (root zone): Moderately slow
 Available water capacity: About 0.9 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Wardenot and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Desert needlegrass, bud sagebrush, bottlebrush squirreltail, black greasewood, Indian ricegrass, galleta, winterfat, shadscale, fourwing saltbush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel
 Layer 1--0 to 5 inches; very gravelly loamy sand
 Layer 2--5 to 60 inches; stratified very gravelly fine sandy loam to extremely cobbly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very low
 Permeability class (root zone): Rapid
 Available water capacity: About 3 inches
 Present flooding: Rare
 Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Izo and similar soils

Landform: Drainageways
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Fourwing saltbush, littleleaf horsebrush, rubber rabbitbrush, Indian ricegrass, Cooper wolfberry, burrobrush, spiny hopsage, Nevada ephedra

Typical profile:

Surface rock fragments: About 3 percent cobbles, 50 percent gravel
 Layer 1--0 to 8 inches; very gravelly sand
 Layer 2--8 to 60 inches; stratified gravelly loamy sand to extremely gravelly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Negligible

Permeability class (root zone): Rapid

Available water capacity: About 2 inches

Present flooding: Occasional

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7w

Ecological site: 029XY041NV--Dry Wash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Unsel and similar soils**

Composition: 0 to 7 percent

Slope: 2 to 8 percent

Landform: Summits of fan remnants

Typical vegetation: Indian ricegrass, galleta, bottlebrush squirreltail, Nevada ephedra, shadscale, fourwing saltbush, desert needlegrass, black greasewood, winterfat, bud sagebrush

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Typic Haplocambids and similar soils

Composition: 0 to 5 percent

Classification: Loamy-skeletal, mixed, superactive, mesic Typic Haplocambids

Slope: 8 to 30 percent

Landform: Fan remnants

Typical vegetation: Nevada ephedra, littleleaf horsebrush, spiny hopsage, bud sagebrush, Anderson wolfberry, desert needlegrass, Indian ricegrass, galleta

Ecological site: 029XY016NV--Loamy Upland 5-8 P.Z.

Tognoni and similar soils

Composition: 0 to 3 percent

Slope: 8 to 30 percent

Landform: Rock pediments

Typical vegetation: Desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass, spiny menodora, galleta, winterfat, Nevada ephedra, shadscale, bud sagebrush, dalea

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2760--Downeyville-Unsel-Tokoper association***Map Unit Setting***

MLRA: 29

Landscape: Hills

Elevation: 4,500 to 5,200

Precipitation: 4 to 8 inches

Air temperature: 48 to 55 degrees Fahrenheit

Frost-free period: 100 to 140 days

Composition

Downeyville very gravelly fine sandy loam, 15 to 50 percent slopes--35 percent

Unsel gravelly sandy loam, 4 to 15 percent slopes--30 percent

Tokoper very cobbly sandy loam, 4 to 15 percent slopes--20 percent

Pintwater very gravelly fine sandy loam, 30 to 75 percent slopes--8 percent

Espint very cobbly fine sandy loam, 15 to 50 percent slopes--4 percent

Vigus gravelly sandy loam, 4 to 30 percent slopes--3 percent

Component Description**Downeyville and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Black greasewood, bottlebrush squirreltail, desert needlegrass, spiny menodora, galleta, Indian ricegrass, winterfat, Nevada ephedra, dalea, shadscale, bud sagebrush

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 4 inches; very gravelly fine sandy loam

Layer 2--4 to 9 inches; very gravelly loam

Layer 3--9 to 13 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Component Description

Unsel and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, galleta, desert needlegrass, bottlebrush squirreltail, black greasewood, winterfat, Nevada ephedra, shadscale, fourwing saltbush, bud sagebrush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 55 percent gravel

Layer 1--0 to 7 inches; gravelly sandy loam

Layer 2--7 to 11 inches; gravelly clay loam

Layer 3--11 to 20 inches; gravelly sandy loam

Layer 4--20 to 60 inches; very gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: High

Permeability class (root zone): Moderately slow

Sodicity: Sodic within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4e

Nonirrigated land capability: 7c

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Component Description

Tokoper and similar soils

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Desert needlegrass, spiny horsebrush, Indian ricegrass, black greasewood,

wolfberry, spiny menodora, galleta, Nevada ephedra, shadscale

Typical profile:

Surface rock fragments: About 5 percent stones, 15 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; very cobbly sandy loam

Layer 2--3 to 9 inches; very gravelly clay loam

Layer 3--9 to 14 inches; extremely gravelly loam

Layer 4--14 to 15 inches; indurated

Layer 5--15 to 25 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 8 to 14 inches

Bedrock (lithic): 8 to 15 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Pintwater and similar soils

Composition: 0 to 8 percent

Slope: 30 to 75 percent

Landform: Hills

Typical vegetation: Horsebrush, Indian ricegrass, shadscale, Cooper wolfberry, bud sagebrush, black greasewood, Nevada dalea

Ecological site: 029XY033NV--Sodic Hill 3-5 P.Z.

Espint and similar soils

Composition: 0 to 4 percent

Slope: 15 to 50 percent

Landform: Hills

Typical vegetation: Douglas rabbitbrush, Wyoming big sagebrush, desert needlegrass, other perennial forbs, Indian ricegrass, Nevada ephedra, bottlebrush squirreltail, spiny hopsage, winterfat, galleta

Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Vigus and similar soils

Composition: 0 to 3 percent

Slope: 4 to 30 percent

Landform: Fan remnants

Typical vegetation: Black greasewood, wolfberry, spiny horsebrush, spiny menodora, galleta, Nevada ephedra, shadscale, desert needlegrass, Indian ricegrass

Ecological site: 029XY022NV--Sodic Hill 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2770--Bullfor-Panor-Bluepoint association**Map Unit Setting**

MLRA: 30

Landscape: Bolson

Elevation: 2,300 to 2,800

Precipitation: 3 to 9 inches

Air temperature: 57 to 66 degrees Fahrenheit

Frost-free period: 180 to 220 days

Composition

Bullfor fine sand, 2 to 4 percent slopes--50 percent

Panor sandy loam, 2 to 4 percent slopes--30 percent

Bluepoint loamy fine sand, 4 to 15 percent slopes--15 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description**Bullfor and similar soils**

Landform: Sand sheets

Parent material: Eolian sands and alluvium derived from mixed rock sources

Typical vegetation: Winterfat, spiny hopsage, Nevada ephedra, shadscale, fourwing saltbush, spiny menodora, desert needlegrass, Indian ricegrass, white bursage

Typical profile:

Layer 1--0 to 1 inches; fine sand

Layer 2--1 to 24 inches; loamy sand

Layer 3--24 to 25 inches; indurated

Layer 4--25 to 60 inches; very gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Rapid

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Component Description**Panor and similar soils**

Landform: Alluvial flats

Parent material: Lacustrine deposits

Typical vegetation: Shadscale, white bursage, ephedra, creosotebush, pale wolfberry, Indian ricegrass

Typical profile:

Surface rock fragments: About 5 percent gravel

Layer 1--0 to 1 inches; sandy loam

Layer 2--1 to 5 inches; silt loam

Layer 3--5 to 23 inches; clay loam

Layer 4--23 to 60 inches; gravelly clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 10 inches

Present flooding: None

Natural drainage class: Moderately well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description**Bluepoint and similar soils**

Landform: Dunes

Parent material: Eolian sands

Typical vegetation: Creosotebush, white bursage, screwbean mesquite, honey mesquite, Indian ricegrass, shadscale, fourwing saltbush, catclaw

Typical profile:

Layer 1--0 to 9 inches; loamy fine sand

Layer 2--9 to 17 inches; stratified fine sand to gravelly loamy fine sand

Layer 3--17 to 41 inches; fine sand

Layer 4--41 to 60 inches; stratified sand to very fine sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XY045NV--Shallow Gravelly Loam 8-10 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yermo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: White burrobrush, wolfberry, creosotebush, cattle saltbush, white bursage

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2781--Haymont-Bluepoint-Panor complex, 0 to 4 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Bolson

Elevation: 2,300 to 2,700

Precipitation: 3 to 7 inches

Air temperature: 61 to 66 degrees Fahrenheit

Frost-free period: 180 to 240 days

Composition

Haymont very fine sandy loam, 2 to 4 percent slopes--50 percent

Bluepoint loamy fine sand, 0 to 4 percent slopes--20 percent

Panor sandy loam, 2 to 4 percent slopes--15 percent

Cobatus loam, 2 to 4 percent slopes--5 percent

Lewdlac gravelly loamy fine sand, 2 to 4 percent slopes--5 percent

Playas silty clay loam--5 percent

Component Description

Haymont and similar soils

Landform: Alluvial flats

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, Parry's saltbush, inland saltgrass, black greasewood, alkali sacaton

Typical profile:

Layer 1--0 to 6 inches; very fine sandy loam

Layer 2--6 to 40 inches; stratified very fine sandy loam to silt loam

Layer 3--40 to 60 inches; stratified fine sandy loam to silt loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low

Permeability class (root zone): Moderate

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 10 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY076NV--Sodic Flat 5-8 P.Z.

Component Description

Bluepoint and similar soils

Landform: Dunes

Parent material: Eolian sands

Typical vegetation: Honey mesquite, screwbean mesquite, catclaw, white bursage, Indian ricegrass, creosotebush, shadscale, fourwing saltbush

Typical profile:

Layer 1--0 to 9 inches; loamy fine sand

Layer 2--9 to 17 inches; stratified fine sand to gravelly loamy fine sand

Layer 3--17 to 41 inches; fine sand

Layer 4--41 to 60 inches; stratified sand to very fine sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Negligible

Permeability class (root zone): Moderately rapid

Available water capacity: About 5 inches

Present flooding: None

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XY045NV--Shallow Gravelly Loam 8-10 P.Z.

Component Description

Panor and similar soils

Landform: Alluvial flats

Parent material: Lacustrine deposits

Typical vegetation: Indian ricegrass, pale wolfberry, creosotebush, shadscale, white bursage, ephedra

Typical profile:

Surface rock fragments: About 5 percent gravel

Layer 1--0 to 1 inches; sandy loam

Layer 2--1 to 5 inches; silt loam

Layer 3--5 to 23 inches; clay loam

Layer 4--23 to 60 inches; gravelly clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 10 inches

Present flooding: None

Natural drainage class: Moderately well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Cobatus and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Alluvial flats

Typical vegetation: Alkali sacaton, Baltic rush, inland saltgrass, big saltbush, fourwing saltbush

Ecological site: 030XY024NV--Saline Bottom

Lewdlac and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Alluvial flats

Typical vegetation: Alkali sacaton, shadscale, wolfberry, fourwing saltbush, cattle saltbush

Ecological site: 030XY040NV--Sodic Terrace 3-8 P.Z.

Playas

Composition: 0 to 5 percent

Landform: Playas

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2810--Ashmed-Yermo-Niavi association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,000 to 4,200

Precipitation: 5 to 8 inches

Air temperature: 57 to 64 degrees Fahrenheit

Frost-free period: 200 to 230 days

Composition

Ashmed gravelly fine sandy loam, 2 to 4 percent slopes--50 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--20 percent
 Niavi extremely cobbly fine sandy loam, 2 to 8 percent slopes--15 percent
 Canoto very gravelly sandy loam, 2 to 8 percent slopes--8 percent
 Arizo very gravelly sandy loam, 0 to 4 percent slopes--4 percent
 Yurm very gravelly sandy loam, 2 to 4 percent slopes--2 percent
 Ashmed gravelly fine sandy loam, 2 to 4 percent slopes--1 percent

Component Description

Ashmed moist and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Big galleta, wolfberry, creosotebush, ephedra, shadscale, white bursage, Indian ricegrass

Typical profile:

Surface rock fragments: About 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 4 inches; gravelly fine sandy loam
 Layer 2--4 to 7 inches; gravelly silt loam
 Layer 3--7 to 24 inches; extremely gravelly sandy clay loam
 Layer 4--24 to 32 inches; extremely gravelly coarse sandy loam
 Layer 5--32 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Medium
 Permeability class (root zone): Moderately slow
 Salinity: Saline within 40 inches
 Sodicity: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB005NV--Limy 5-7 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Indian ricegrass, creosotebush, range ratany, white bursage, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel
 Layer 1--0 to 6 inches; very gravelly sandy loam
 Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description

Niavi and similar soils

Landform: Stream terraces
 Parent material: Alluvium derived from quartzite
 Typical vegetation: Virgin River encelia, creosotebush, ephedra, Mojave buckwheat, white bursage, big galleta, range ratany, Anderson's wolfberry

Typical profile:

Surface rock fragments: About 1 percent stones, 35 percent cobbles, 40 percent gravel
 Layer 1--0 to 2 inches; extremely cobbly fine sandy loam
 Layer 2--2 to 8 inches; extremely gravelly coarse sandy loam
 Layer 3--8 to 29 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam
 Layer 4--29 to 60 inches; stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 2 inches

Present flooding: Occasional

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XB134NV--Quartzite Outwash

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Canoto and similar soils**

Composition: 0 to 8 percent

Slope: 2 to 8 percent

Landform: Inset fans

Typical vegetation: Creosotebush, wolfberry, Indian ricegrass, big galleta, ephedra, white bursage, shadscale

Ecological site: 030XB005NV

Arizo and similar soils

Composition: 0 to 4 percent

Slope: 0 to 4 percent

Landform: Inset fans

Typical vegetation: Indian ricegrass, creosotebush, white burrobrush, cattle saltbush, white bursage

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Yurm and similar soils

Composition: 0 to 2 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Indian ricegrass, wolfberry, shadscale, white bursage, creosotebush, desert needlegrass

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Ashmed and similar soils

Composition: 0 to 1 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Seepweed, desertholly, Fremont dalea, Indian ricegrass, shadscale

Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2820--Strozi-Corbilt association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 2,800 to 4,000

Precipitation: 3 to 9 inches

Air temperature: 58 to 63 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Strozi gravelly fine sandy loam, 0 to 2 percent slopes--60 percent

Corbilt gravelly fine sandy loam, 0 to 2 percent slopes--30 percent

Leo fine sand, 2 to 4 percent slopes--10 percent

Component Description**Strozi and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bud sagebrush, fourwing saltbush, shadscale

Typical profile:

Surface rock fragments: About 1 percent cobbles, 50 percent gravel

Layer 1--0 to 5 inches; gravelly fine sandy loam

Layer 2--5 to 13 inches; clay loam

Layer 3--13 to 32 inches; very gravelly sandy loam

Layer 4--32 to 33 inches; cemented

Layer 5--33 to 60 inches; very gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Medium

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XY013NV--Shallow Silty

Component Description

Corbilt and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, Indian ricegrass, wolfberry, shadscale, white bursage, white burrobrush

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel
 Layer 1--0 to 4 inches; gravelly fine sandy loam
 Layer 2--4 to 32 inches; gravelly fine sandy loam
 Layer 3--32 to 56 inches; very gravelly sandy loam
 Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Very low

Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 6 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Leo and similar soils

Composition: 0 to 10 percent

Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: Fourwing saltbush, winterfat, sand dropseed, Indian ricegrass, needleandthread

Ecological site: 029XY012NV--Sandy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section

"Engineering" and "Soil Properties" sections

2840--Armpup-Strozi association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,000 to 4,000

Precipitation: 3 to 9 inches

Air temperature: 58 to 64 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Armpup fine sand, 2 to 4 percent slopes--60 percent

Strozi sandy loam, 2 to 4 percent slopes--35 percent

Rock outcrop--5 percent

Component Description

Armpup and similar soils

Landform: Ballenas

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Shadscale, inland saltgrass, creosotebush, alkali sacaton, desertholly

Typical profile:

Layer 1--0 to 3 inches; fine sand

Layer 2--3 to 18 inches; gravelly clay

Layer 3--18 to 46 inches; extremely gravelly sandy clay

Layer 4--46 to 55 inches; very gravelly loamy sand

Layer 5--55 to 59 inches; weathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: High

Depth to restrictive feature: Bedrock (paralithic): 40 to 60 inches

Permeability class (root zone): Slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 8 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XY025NV--Sodic Flat

Component Description**Strozi and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny menodora, shadscale, fourwing saltbush, white bursage, desert needlegrass, Indian ricegrass, desert needlegrass, Indian ricegrass, shadscale, wolfberry, creosotebush, ephedra, fourwing saltbush, Nevada ephedra, spiny menodora, winterfat, spiny hopsage

Typical profile:

Surface rock fragments: About 1 percent cobbles, 50 percent gravel

Layer 1--0 to 5 inches; sandy loam

Layer 2--5 to 13 inches; clay loam

Layer 3--13 to 32 inches; very gravelly sandy loam

Layer 4--32 to 33 inches; cemented

Layer 5--33 to 60 inches; very gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Medium

Depth to restrictive feature: Duripan: 20 to 40 inches

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA051NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Rock outcrop**

Composition: 0 to 5 percent

Landform: Pediments

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2850--Scottcas-Yermo association***Map Unit Setting***

MLRA: 30

Landscape: Fan piedmont

Elevation: 4,300 to 4,700

Precipitation: 4 to 8 inches

Air temperature: 57 to 64 degrees Fahrenheit

Frost-free period: 180 to 210 days

Composition

Scottcas very gravelly sandy loam, 4 to 8 percent slopes--50 percent

Yermo very gravelly sandy loam, 4 to 8 percent slopes--35 percent

Arizo very gravelly loamy sand, 2 to 8 percent slopes--10 percent

Greyeagle very gravelly sandy loam, 4 to 8 percent slopes--5 percent

Component Description**Scottcas and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, bud sagebrush, shadscale, Nevada ephedra, creosotebush, Anderson wolfberry

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 70 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam

Layer 2--2 to 7 inches; very gravelly sandy clay loam

Layer 3--7 to 15 inches; extremely gravelly sandy loam

Layer 4--15 to 21 inches; very gravelly loamy coarse sand

Layer 5--21 to 60 inches; stratified extremely gravelly loamy coarse sand to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent

Runoff: High

Permeability class (root zone): Moderately slow

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, bud sagebrush, shadscale, Nevada ephedra, creosotebush, Anderson wolfberry

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA061NV

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Arizo and similar soils

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: White bursage, desert needlegrass, bladdersage, creosotebush, white burrobrush, cattle saltbush, Indian ricegrass

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Greyeagle and similar soils

Composition: 0 to 5 percent

Slope: 4 to 8 percent

Landform: Fan remnants

Typical vegetation: Desert needlegrass, creosotebush, Anderson wolfberry, Nevada ephedra, shadscale, bud sagebrush

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2860--Sezna-Yermo association

Map Unit Setting

MLRA: 30

Landscape: Fan piedmont

Elevation: 4,000 to 4,200

Precipitation: 4 to 8 inches

Air temperature: 57 to 64 degrees Fahrenheit

Frost-free period: 200 to 240 days

Composition

Sezna gravelly sandy loam, 2 to 8 percent slopes--50 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--35 percent

Wodavar extremely gravelly fine sandy loam, 4 to 8 percent slopes--10 percent

Arizo very gravelly loamy sand, 2 to 4 percent slopes--5 percent

Component Description

Sezna and similar soils

Landform: Ballenas

Parent material: Alluvium derived from limestone and dolomite

Typical vegetation: Rabbitbrush, desert needlegrass, Indian ricegrass, Anderson wolfberry, desert alysum, creosotebush, range ratany, white burrobrush, Nevada ephedra, shadscale, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 1 percent cobbles, 60 percent gravel

Layer 1--0 to 3 inches; gravelly sandy loam

Layer 2--3 to 18 inches; very cobbly clay loam

Layer 3--18 to 60 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very high

Depth to restrictive feature: Petrocalcic: 10 to 20 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 1.6 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, Indian ricegrass, range ratany, desert needlegrass, creosotebush

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Wodavar and similar soils

Composition: 0 to 10 percent

Slope: 4 to 8 percent

Landform: Lake terraces

Typical vegetation: Desert needlegrass, Nevada ephedra, white burrobrush, shadscale, Anderson wolfberry, desert alysum, range ratany, rabbitbrush, Indian ricegrass, white bursage, creosotebush

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Arizo and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Drainageways

Typical vegetation: Bladdersage, Indian ricegrass, creosotebush, white burrobrush, cattle saltbush, white bursage, desert needlegrass

Ecological site: 030XA076NV--Upland Wash 5-12 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2870--Kanackey very gravelly loam, 15 to 50 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Mountains

Elevation: 3,400 to 3,700

Precipitation: 5 to 8 inches

Air temperature: 57 to 63 degrees Fahrenheit

Frost-free period: 190 to 240 days

Composition

Kanackey very gravelly loam, 15 to 50 percent slopes--85 percent

Rock outcrop--10 percent

Zibate very gravelly sandy loam, 15 to 50 percent slopes--5 percent

Component Description

Kanackey and similar soils

Landform: Mountains

Parent material: Residuum weathered from quartzite

Typical vegetation: Creosotebush, Nevada ephedra, desert needlegrass, other shrubs, other perennial

forbs, Indian ricegrass, pale wolfberry, white bursage, range ratany, fourwing saltbush, shadscale

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 10 percent cobbles, 65 percent gravel
 Layer 1--0 to 3 inches; very gravelly loam
 Layer 2--3 to 7 inches; very cobbly clay
 Layer 3--7 to 14 inches; extremely cobbly clay
 Layer 4--14 to 24 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 8 to 14 inches
 Permeability class (root zone): Slow
 Available water capacity: About 1.3 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: O30XA059NV--Gravelly Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Rock outcrop

Composition: 0 to 10 percent
 Landform: Mountains
 Ecological site: None assigned

Zibate and similar soils

Composition: 0 to 5 percent
 Slope: 15 to 50 percent
 Landform: Mountains
 Typical vegetation: Blackbrush, Indian ricegrass, desert needlegrass
 Ecological site: O30XA095NV--Shallow Gravelly Slope 8-12 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2880--Bacho-Yermo-Arizo association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 3,700 to 4,200
 Precipitation: 4 to 9 inches
 Air temperature: 57 to 66 degrees Fahrenheit
 Frost-free period: 180 to 220 days

Composition

Bacho very gravelly sandy loam, 2 to 8 percent slopes--45 percent
 Yermo very gravelly sandy loam, 2 to 4 percent slopes--25 percent
 Arizo very gravelly loamy sand, 2 to 4 percent slopes--15 percent
 Ashmed Family extremely gravelly sandy loam, 2 to 8 percent slopes--10 percent
 Greyeagle very gravelly sandy loam, 2 to 8 percent slopes--5 percent

Component Description

Bacho and similar soils

Landform: Partial ballenas
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Littleleaf horsebrush, spiny horsebrush, spiny menodora, shadscale, fourwing saltbush, Anderson wolfberry, singlewhorl burrobush, winterfat, Nevada ephedra

Typical profile:

Surface rock fragments: About 5 percent stones, 20 percent cobbles, 40 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 11 inches; very gravelly clay
 Layer 3--11 to 36 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 8 to 14 inches
 Permeability class (root zone): Very slow
 Available water capacity: About 1.5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bud sagebrush, shadscale, Nevada ephedra, creosotebush, Anderson wolfberry, desert needlegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Component Description

Arizo and similar soils

Landform: Drainageways

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, creosotebush, cattle saltbush, white burrobrush, Indian ricegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 2 percent cobbles, 45 percent gravel

Layer 1--0 to 8 inches; very gravelly loamy sand

Layer 2--8 to 60 inches; stratified cobbly coarse sand to extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Negligible

Permeability class (root zone): Rapid

Available water capacity: About 3 inches

Present flooding: Rare

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Ashmed Family and similar soils

Composition: 0 to 10 percent

Classification: Loamy-skeletal, mixed, superactive, thermic Typic Haplargids

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Shadscale, desert needlegrass, Indian ricegrass, creosotebush, Nevada ephedra, white bursage

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Greyeagle and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent

Landform: Fan remnants

Typical vegetation: Shadscale, Nevada ephedra, creosotebush, Indian ricegrass, desert needlegrass, white bursage

Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2890--Nopah-Woda-Gullied land association

Map Unit Setting

MLRA: 30

Landscape: Intermontane basin

Elevation: 2,400 to 2,600

Precipitation: 3 to 5 inches

Air temperature: 61 to 64 degrees Fahrenheit
Frost-free period: 200 to 220 days

Composition

Nopah loam, 4 to 8 percent slopes--35 percent
Woda gravelly sandy loam, 2 to 15 percent slopes--30 percent
Gullied Land variable, 15 to 75 percent slopes--20 percent
Wodavar extremely gravelly fine sandy loam, 2 to 8 percent slopes--10 percent
Nowoy gravelly loamy fine sand, 2 to 8 percent slopes--5 percent

Component Description

Nopah and similar soils

Landform: Alluvial flats
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Shadscale, fourwing saltbush, Torrey quailbush, spinescale saltbush, rubber rabbitbrush, wolfberry, Indian ricegrass, other shrubs

Typical profile:

Layer 1--0 to 6 inches; loam
Layer 2--6 to 60 inches; stratified loam to clay

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 8 percent
Runoff: Very high
Permeability class (root zone): Slow
Salinity: Saline within 40 inches
Available water capacity: About 12 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 3s
Nonirrigated land capability: 7s
Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Component Description

Woda and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rocks over lacustrine deposits
Typical vegetation: Indian ricegrass, other shrubs, creosotebush, shadscale

Typical profile:

Surface rock fragments: About 45 percent gravel
Layer 1--0 to 1 inches; gravelly sandy loam
Layer 2--1 to 10 inches; sandy loam
Layer 3--10 to 18 inches; gravelly clay loam
Layer 4--18 to 60 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 15 percent
Runoff: Very high
Depth to restrictive feature: Petrocalcic: 6 to 20 inches
Permeability class (root zone): Moderately slow
Salinity: Saline within 40 inches
Available water capacity: About 2 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA047NV--Barren Fan 3-8 P.Z.

Component Description

Gullied Land

Landform: Drainageways

Component Properties and Qualities

Slope: 15 to 75 percent
Runoff: Medium

Interpretive Groups

Nonirrigated land capability: 8w
Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Wodavar and similar soils

Composition: 0 to 10 percent
Slope: 2 to 8 percent
Landform: Lake terraces
Typical vegetation: Indian ricegrass, desert needlegrass, shadscale, creosotebush
Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Nowoy and similar soils

Composition: 0 to 5 percent

Slope: 2 to 8 percent
 Landform: Alluvial flats
 Typical vegetation: Pale wolfberry, shadscale, white burrobrush, inland saltgrass, cattle saltbush, white bursage
 Ecological site: 030XA057NV--Dry Sodic Terrace 3-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2900--Playas

Map Unit Setting

MLRA: 30
 Landscape: Bolson
 Elevation: 2,400 to 5,800

Composition

Playas silty clay, 0 to 1 percent slopes--100 percent

Component Description

Playas

Landform: Playas

Component Properties and Qualities

Slope: 0 to 1 percent
 Runoff: Negligible
 Salinity: Saline within 40 inches
 Sodicty: Sodic within 40 inches
 Water table: Present

Interpretive Groups

Nonirrigated land capability: 8w
 Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Engineering" and "Soil Properties" sections

2901--Playas-Corbilt-Bluepoint association

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin

Elevation: 2,400 to 2,700
 Precipitation: 3 to 7 inches
 Air temperature: 61 to 68 degrees Fahrenheit
 Frost-free period: 200 to 240 days

Composition

Playas silty clay loam, 0 to 1 percent slopes--40 percent
 Corbilt gravelly fine sandy loam, 0 to 2 percent slopes--30 percent
 Bluepoint loamy fine sand, 0 to 4 percent slopes--20 percent
 Typic Torriorthents, 0 to 2 percent slopes--10 percent

Component Description

Playas

Landform: Playas

Component Properties and Qualities

Slope: 0 to 1 percent
 Runoff: Negligible
 Salinity: Saline within 40 inches
 Sodicty: Sodic within 40 inches
 Water table: Present

Interpretive Groups

Nonirrigated land capability: 8w
 Ecological site: None assigned

Component Description

Corbilt and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: White bursage, white burrobrush, wolfberry, Indian ricegrass, desert needlegrass, shadscale

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 50 percent gravel
 Layer 1--0 to 4 inches; gravelly fine sandy loam
 Layer 2--4 to 32 inches; gravelly fine sandy loam
 Layer 3--32 to 56 inches; very gravelly sandy loam
 Layer 4--56 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Very low
 Depth to restrictive feature: Duripan: 40 to 60 inches

Permeability class (root zone): Moderately rapid
 Available water capacity: About 6 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c
 Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Component Description

Bluepoint and similar soils

Landform: Dunes
 Parent material: Eolian sands
 Typical vegetation: White bursage, shadscale, creosotebush, Indian ricegrass, honey mesquite, screwbean mesquite, catclaw, fourwing saltbush

Typical profile:

Layer 1--0 to 9 inches; loamy fine sand
 Layer 2--9 to 17 inches; stratified fine sand to gravelly loamy fine sand
 Layer 3--17 to 41 inches; fine sand
 Layer 4--41 to 60 inches; stratified sand to very fine sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: Negligible
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XY045NV--Shallow Gravelly Loam 8-10 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Typic Torriorthents and similar soils

Composition: 0 to 10 percent
 Classification: Fine, smectitic, calcareous, thermic
 Typic Torriorthents
 Slope: 0 to 2 percent
 Landform: Alluvial flats

Typical vegetation: Shadscale, desert needlegrass, Indian ricegrass, creosotebush
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2903--Playas-Mobl-Kawich complex, 0 to 4 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Bolson
 Elevation: 4,100 to 4,800
 Precipitation: 5 to 8 inches
 Air temperature: 55 to 62 degrees Fahrenheit
 Frost-free period: 140 to 190 days

Composition

Playas silty clay loam, 0 to 1 percent slopes--45 percent
 Mobl fine sandy loam, 0 to 2 percent slopes--30 percent
 Kawich fine sand, 0 to 4 percent slopes--15 percent
 Sanwell gravelly fine sandy loam, 0 to 2 percent slopes--8 percent
 Cirac gravelly sandy loam, 0 to 2 percent slopes--2 percent

Component Description

Playas

Landform: Playas

Component Properties and Qualities

Slope: 0 to 1 percent
 Runoff: Negligible
 Salinity: Saline within 40 inches
 Sodicity: Sodic within 40 inches
 Water table: Present

Interpretive Groups

Nonirrigated land capability: 8w
 Ecological site: None assigned

Component Description

Mobl and similar soils

Landform: Alluvial flats

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, fourwing saltbush, desert needlegrass, spiny menodora, wolfberry, white burrobrush, shadscale

Typical profile:

Surface rock fragments: About 2 percent cobbles, 35 percent gravel

Layer 1--0 to 2 inches; fine sandy loam

Layer 2--2 to 7 inches; sandy clay loam

Layer 3--7 to 17 inches; sandy loam

Layer 4--17 to 60 inches; stratified sandy loam to extremely gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Component Description

Kawich and similar soils

Landform: Dunes

Parent material: Eolian sands

Typical vegetation: Needleandthread, horsebrush, black greasewood, Indian ricegrass, fourwing saltbush

Typical profile:

Layer 1--0 to 2 inches; fine sand

Layer 2--2 to 60 inches; fine sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Negligible

Permeability class (root zone): Very rapid

Salinity: Saline within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 027XY016NV--Sodic Dunes

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Sanwell and similar soils

Composition: 0 to 8 percent

Slope: 0 to 2 percent

Landform: Fan remnants

Typical vegetation: Creosotebush, range ratany, shadscale, white bursage, desert needlegrass, Indian ricegrass

Ecological site: 030XA058NV--Limy 5-8 P.Z.

Cirac and similar soils

Composition: 0 to 2 percent

Slope: 0 to 2 percent

Landform: Alluvial flats

Typical vegetation: Rubber rabbitbrush, alkali sacaton, black greasewood, Indian ricegrass, fourwing saltbush, shadscale, inland saltgrass, white burrobrush, seepweed

Ecological site: 027XY025NV--Sodic Flat

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2910--Dune land

Map Unit Setting

MLRA: 30

Landscape: Bolson

Elevation: 2,400 to 5,400

Composition

Dune land fine sand, 0 to 30 percent slopes--100 percent

Component Description

Dune land

Landform: Dunes

Component Properties and Qualities

Slope: 0 to 30 percent

Runoff: Very low

Interpretive Groups

Nonirrigated land capability: 8e

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Engineering" and "Soil Properties" sections

2920--Dumps, mine**Map Unit Setting**

MLRA: 30

Landscape: Hills

Elevation: 3,000 to 6,500

Composition

Dumps--100 percent

Component Description**Dumps**

Landform: Hills

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Engineering" and "Soil Properties" sections

2930--Seralin-Rock outcrop-Sed association**Map Unit Setting**

MLRA: 30

Landscape: Mountains

Elevation: 5,900 to 7,800

Precipitation: 10 to 14 inches

Air temperature: 52 to 57 degrees Fahrenheit

Frost-free period: 130 to 180 days

Composition

Seralin extremely gravelly very fine sandy loam, 30 to 75 percent slopes--55 percent

Rock outcrop--15 percent

Sed very gravelly loam, 15 to 50 percent slopes--15 percent

Sed very gravelly loam, moist, 15 to 50 percent slopes--5 percent

Ustic Eutrocrypts very cobbly loam, 30 to 75 percent slopes--4 percent

Boxspring extremely gravelly loam, 15 to 50 percent slopes--3 percent

Seralin extremely gravelly very fine sandy loam, moist, 30 to 75 percent slopes--2 percent

Boxspring extremely gravelly loam, moist, 15 to 50 percent slopes--1 percent

Component Description**Seralin and similar soils**

Landform: Mountains

Parent material: Colluvium derived from limestone over residuum weathered from limestone

Typical vegetation: Singleleaf pinyon, eriogonum, needlegrass, turbinella oak, Gambel oak, Sandberg bluegrass, muttongrass, Utah juniper, yellowleaf silktassel, green ephedra, Stansbury cliffrose, curleaf mountainmahogany

Typical profile:

Surface rock fragments: About 2 percent stones, 10 percent cobbles, 65 percent gravel

Layer 1--0 to 2 inches; extremely gravelly very fine sandy loam

Layer 2--2 to 7 inches; very gravelly loam

Layer 3--7 to 14 inches; very gravelly loam

Layer 4--14 to 18 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 30 to 75 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 14 to 20 inches

Permeability class (root zone): Moderate

Available water capacity: About 1.1 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY135NV--PIMO-JUOS WSG: ORO507

Component Description**Rock outcrop**

Landform: Mountains

Component Properties and Qualities

Slope: 15 to 75

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Component Description**Sed and similar soils**

Landform: Mountains

Parent material: Residuum weathered from quartzite

Typical vegetation: Needlegrass, desert bitterbrush, bluegrass, green ephedra, Mexican cliffrose, needleleaf rabbitbrush, turbinella oak, Indian ricegrass, Wyoming big sagebrush, manzanita, curlleaf mountainmahogany

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 40 percent gravel

Layer 1--0 to 7 inches; very gravelly loam

Layer 2--7 to 20 inches; very gravelly loam

Layer 3--20 to 24 inches; extremely stony clay loam

Layer 4--24 to 34 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 20 to 40 inches

Permeability class (root zone): Moderately slow

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY065NV--PIMO-JUOS WSG: OR2

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Sed moist and similar soils**

Composition: 0 to 5 percent

Slope: 15 to 50 percent

Landform: Mountains

Typical vegetation: Desert bitterbrush, muttongrass, Indian ricegrass, green ephedra, Mexican cliffrose, Utah juniper, Wyoming big sagebrush, mountain big sagebrush, desert needlegrass, Utah serviceberry, yellowleaf silktassel, singleleaf pinyon

Ecological site: 029XY067NV--PIMO-JUOS WSG: OR1

Ustic Eutrocryepts and similar soils

Composition: 0 to 4 percent

Classification: Loamy-skeletal, mixed, superactive Ustic Eutrocryepts

Slope: 30 to 75 percent

Landform: Backslopes of mountains

Typical vegetation: Sandberg bluegrass, Gambel's oak, greenleaf manzanita, Utah serviceberry, bottlebrush squirreltail, muttongrass, Canby bluegrass, mountain big sagebrush, ponderosa pine

Ecological site: 029XY086NV--Pipo Wsg: 4r7

Boxspring and similar soils

Composition: 0 to 3 percent

Slope: 15 to 50 percent

Landform: Backslopes of mountains

Typical vegetation: Desert needlegrass, blackbrush, Nevada ephedra, desert bitterbrush

Ecological site: 029XY077NV--Shallow Gravelly Loam 8-10 P.Z.

Seralin moist and similar soils

Composition: 0 to 2 percent

Slope: 30 to 75 percent

Landform: Mountains

Typical vegetation: Wyoming big sagebrush, curlleaf mountainmahogany, Stansbury cliffrose, desert snowberry, birchleaf mountainmahogany, needlegrass, turbinella oak, Gambel oak, black sagebrush, Sandberg bluegrass, singleleaf pinyon, muttongrass, green ephedra, sulfur eriogonum, yellowleaf silktassel, Utah juniper

Ecological site: 029XY135NV--PIMO-JUOS WSG: ORO507

Boxspring moist and similar soils

Composition: 0 to 1 percent

Slope: 15 to 50 percent

Landform: Backslopes of mountains

Typical vegetation: Black sagebrush, green ephedra, Utah agave, pointleaf manzanita, Utah serviceberry, arid needlegrass

Ecological site: 029XY137NV--Limestone Ridge 8-12 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Forest land" section
 "Engineering" and "Soil Properties" sections

2940--Schader-Sed-Cruzspring association

Map Unit Setting

MLRA: 30
 Landscape: Mountains
 Elevation: 5,800 to 8,100
 Precipitation: 8 to 14 inches
 Air temperature: 51 to 57 degrees Fahrenheit
 Frost-free period: 130 to 180 days

Composition

Schader extremely gravelly sandy loam, 15 to 50 percent slopes--40 percent
 Sed very gravelly loam, 15 to 50 percent slopes--30 percent
 Cruzspring extremely gravelly sandy loam, 15 to 30 percent slopes--15 percent
 Rock outcrop--7 percent
 Sed very gravelly loam, 15 to 50 percent slopes--5 percent
 Veet Family very gravelly sandy loam, 2 to 8 percent slopes--1 percent
 Seralin extremely gravelly very fine sandy loam, 30 to 75 percent slopes--1 percent
 Ustic Eutrocryepts very cobbly loam, 30 to 75 percent slopes--1 percent

Component Description

Schader and similar soils

Landform: Backslopes of mountains
 Parent material: Colluvium derived from quartzite over residuum weathered from quartzite
 Typical vegetation: Sandberg bluegrass, fourwing saltbush, Wyoming big sagebrush, needleandthread, desert needlegrass, Indian ricegrass, ephedra

Typical profile:

Surface rock fragments: About 3 percent stones, 10 percent cobbles, 50 percent gravel
 Layer 1--0 to 2 inches; extremely gravelly sandy loam
 Layer 2--2 to 9 inches; very gravelly loam
 Layer 3--9 to 28 inches; extremely gravelly sandy clay loam
 Layer 4--28 to 32 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 20 to 40 inches
 Permeability class (root zone): Moderate
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY010NV--Loamy Slope 8-10 P.Z.

Component Description

Sed and similar soils

Landform: Mountains
 Parent material: Residuum weathered from quartzite
 Typical vegetation: Mexican cliffrose, needleleaf rabbitbrush, curleaf mountainmahogany, manzanita, Wyoming big sagebrush, turbinella oak, desert bitterbrush, needlegrass, green ephedra, Indian ricegrass, bluegrass

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 40 percent gravel
 Layer 1--0 to 7 inches; very gravelly loam
 Layer 2--7 to 20 inches; very gravelly loam
 Layer 3--20 to 24 inches; extremely stony clay loam
 Layer 4--24 to 34 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 50 percent
 Runoff: Very high
 Depth to restrictive feature: Bedrock (lithic): 20 to 40 inches
 Permeability class (root zone): Moderately slow
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY065NV--PIMO-JUOS WSG: OR2

Component Description**Cruzspring and similar soils**

Landform: Backslopes of mountains

Parent material: Colluvium derived from quartzite over residuum weathered from quartzite

Typical vegetation: Desert bitterbrush, desert needlegrass, Nevada ephedra, blackbrush

Typical profile:

Surface rock fragments: About 1 percent stones, 5 percent cobbles, 60 percent gravel

Layer 1--0 to 1 inches; extremely gravelly sandy loam

Layer 2--1 to 3 inches; very gravelly sandy loam

Layer 3--3 to 10 inches; very gravelly loam

Layer 4--10 to 13 inches; weathered bedrock

Layer 5--13 to 17 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (paralithic): 10 to 14 inches

Bedrock (lithic): 12 to 20 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.8 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY077NV--Shallow Gravelly Loam 8-10 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Rock outcrop**

Composition: 0 to 7 percent

Landform: Mountains

Ecological site: None assigned

Sed moist and similar soils

Composition: 0 to 5 percent

Slope: 15 to 50 percent

Landform: Mountains

Typical vegetation: Muttongrass, Indian ricegrass, green ephedra, Mexican cliffrose, yellowleaf silktassel, Utah juniper, desert needlegrass, Utah

serviceberry, mountain big sagebrush, Wyoming big sagebrush, desert bitterbrush, singleleaf pinyon
Ecological site: 029XY067NV--PIMO-JUOS WSG: OR1

Veet Family flooded and similar soils

Composition: 0 to 1 percent

Classification: Loamy-skeletal, mixed, superactive, mesic Xeric Haplocambids

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Desert peachbrush, rubber rabbitbrush, skunkbush sumac, Indian ricegrass,

Sandberg bluegrass, big sagebrush

Ecological site: 029XY009NV--Upland Wash

Seralin and similar soils

Composition: 0 to 1 percent

Slope: 30 to 75 percent

Landform: Mountains

Typical vegetation: Muttongrass, curleaf mountainmahogany, Stansbury cliffrose, green ephedra, eriogonum, yellowleaf silktassel, needlegrass, turbinella oak, Gambel oak, Sandberg bluegrass, singleleaf pinyon, Utah juniper
Ecological site: 029XY135NV--PIMO-JUOS WSG: ORO507

Ustic Eutrocryepts and similar soils

Composition: 0 to 1 percent

Classification: Loamy-skeletal, mixed, superactive Ustic Eutrocryepts

Slope: 30 to 75 percent

Landform: Backslopes of mountains

Typical vegetation: Gambel's oak, greenleaf manzanita, Utah serviceberry, bottlebrush squirreltail, Sandberg bluegrass, muttongrass, Canby bluegrass, mountain big sagebrush, ponderosa pine
Ecological site: 029XY086NV--Pipo Wsg: 4r7

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Forest land" section

"Engineering" and "Soil Properties" sections

2950--Pits, gravel**Map Unit Setting**

MLRA: 30

Landscape: Fan piedmont

Elevation: 3,000 to 6,500

Composition

Pits--100 percent

Component Description

Pits

Landform: Fan remnants

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Engineering" and "Soil Properties" sections

2951--Pits, clay

Map Unit Setting

MLRA: 30

Landscape: Bolson

Elevation: 2,200 to 4,100

Composition

Pits--100 percent

Component Description

Pits

Landform: Alluvial flats

Interpretive Groups

Nonirrigated land capability: Not determined

Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Engineering" and "Soil Properties" sections

2960--Tomel-Ardivey-Wardenot association

Map Unit Setting

MLRA: 29

Landscape: Fan piedmont

Elevation: 5,800 to 6,100

Precipitation: 4 to 8 inches

Air temperature: 46 to 57 degrees Fahrenheit

Frost-free period: 100 to 140 days

Composition

Tomel very gravelly sandy loam, 2 to 4 percent slopes--35 percent

Ardivey very gravelly sandy loam, 2 to 8 percent slopes--30 percent

Wardenot very gravelly loamy sand, 2 to 8 percent slopes--20 percent

Izo very gravelly sand, 2 to 8 percent slopes--10 percent

Vigus gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Tomel and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bottlebrush squirreltail, shadscale, Nevada ephedra, bud sagebrush, galleta, Cooper wolfberry, spiny menodora, Indian ricegrass, desert needlegrass, black greasewood

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 50 percent gravel

Layer 1--0 to 3 inches; very gravelly sandy loam

Layer 2--3 to 19 inches; very gravelly sandy clay loam

Layer 3--19 to 26 inches; indurated

Layer 4--26 to 60 inches; extremely gravelly sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very high

Depth to restrictive feature: Duripan: 10 to 20 inches

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY036NV--Cobbly Loam 5-8 P.Z.

Component Description

Ardivey and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Bottlebrush squirreltail, black greasewood, Indian ricegrass, spiny menodora, Cooper wolfberry, winterfat, shadscale, bud sagebrush, galleta

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel

Layer 1--0 to 4 inches; very gravelly sandy loam

Layer 2--4 to 14 inches; very gravelly loam

Layer 3--14 to 60 inches; extremely gravelly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: High

Permeability class (root zone): Moderately slow

Available water capacity: About 3 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 029XY036NV--Cobbly Loam 5-8 P.Z.

Component Description

Wardenot and similar soils

Landform: Fan aprons

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass, galleta, winterfat, shadscale, fourwing saltbush, bud sagebrush

Typical profile:

Surface rock fragments: About gravel 2 percent cobbles, 55 percent

Layer 1--0 to 5 inches; very gravelly loamy sand

Layer 2--5 to 60 inches; stratified very gravelly fine sandy loam to extremely cobbly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Very low

Permeability class (root zone): Rapid

Available water capacity: About 3 inches

Present flooding: Rare

Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Izo and similar soils

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Drainageways

Typical vegetation: Nevada ephedra, burrobrush, fourwing saltbush, rubber rabbitbrush, Indian ricegrass, Cooper wolfberry, spiny hopsage, littleleaf horsebrush

Ecological site: 029XY041NV--Dry Wash

Vigus and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Fan remnants

Typical vegetation: Bud sagebrush, desert needlegrass, winterfat, bottlebrush squirreltail, black greasewood, Indian ricegrass, galleta, shadscale, Nevada ephedra

Ecological site: 029XY017NV--Loamy 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

2961--Tomel-Breko-Wardenot association

Map Unit Setting

MLRA: 29

Landscape: Fan piedmont

Elevation: 5,000 to 5,400

Precipitation: 4 to 9 inches

Air temperature: 52 to 57 degrees Fahrenheit

Frost-free period: 110 to 140 days

Composition

Tomel very gravelly sandy loam, 2 to 8 percent slopes--55 percent
 Breko gravelly sandy loam, 2 to 8 percent slopes--15 percent
 Wardenot gravelly sandy loam, 2 to 8 percent slopes--15 percent
 Veet very gravelly sandy loam, 4 to 15 percent slopes--10 percent
 Izo very gravelly sand, 2 to 4 percent slopes--5 percent

Component Description**Tomel and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, bottlebrush squirreltail, black greasewood, Indian ricegrass, spiny menodora, Cooper wolfberry, galleta, Nevada ephedra, shadscale, bud sagebrush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 5 percent cobbles, 50 percent gravel
 Layer 1--0 to 3 inches; very gravelly sandy loam
 Layer 2--3 to 19 inches; very gravelly sandy clay loam
 Layer 3--19 to 26 inches; indurated
 Layer 4--26 to 60 inches;

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Duripan: 10 to 20 inches
 Permeability class (root zone): Moderately slow
 Salinity: Saline within 40 inches
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY036NV--Cobbly Loam 5-8 P.Z.

Component Description**Breko and similar soils**

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, galleta, desert needlegrass, Wyoming big sagebrush, spiny hopsage, Nevada ephedra, fourwing saltbush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 10 percent cobbles, 50 percent gravel
 Layer 1--0 to 6 inches; gravelly sandy loam
 Layer 2--6 to 21 inches; very gravelly sandy clay loam
 Layer 3--21 to 29 inches; extremely gravelly sandy clay loam
 Layer 4--29 to 60 inches; stratified gravelly sandy loam to extremely gravelly loamy coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: High
 Permeability class (root zone): Moderately slow
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 029XY006NV--Loamy 8-10 P.Z.

Component Description**Wardenot and similar soils**

Landform: Fan aprons

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Spiny menodora, galleta, Nevada ephedra, shadscale, bud sagebrush, black greasewood, Indian ricegrass, bottlebrush squirreltail

Typical profile:

Surface rock fragments: About 2 percent cobbles, 55 percent gravel
 Layer 1--0 to 5 inches; gravelly sandy loam
 Layer 2--5 to 60 inches; stratified very gravelly fine sandy loam to extremely cobbly loamy sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Low

Permeability class (root zone): Moderately rapid
 Available water capacity: About 4 inches
 Present flooding: Rare
 Natural drainage class: Excessively drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 029XY036NV--Cobbly Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Veet and similar soils

Composition: 0 to 10 percent
 Slope: 4 to 15 percent
 Landform: Inset fans
 Typical vegetation: Fourwing saltbush, bud sagebrush, winterfat, spiny hopsage, Wyoming big sagebrush, galleta, desert needlegrass, Indian ricegrass
 Ecological site: 029XY049NV--Sandy Loam 8-12 P.Z.

Izo and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 4 percent
 Landform: Drainageways
 Typical vegetation: Rubber rabbitbrush, fourwing saltbush, burrobrush, Nevada ephedra, spiny hopsage, Cooper wolfberry, littleleaf horsebrush, Indian ricegrass
 Ecological site: 029XY041NV--Dry Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

2970--Destazo-Nowoy-Gullied land association

Map Unit Setting

MLRA: 30
 Landscape: Bolson
 Elevation: 2,100 to 2,400
 Precipitation: 3 to 5 inches
 Air temperature: 61 to 64 degrees Fahrenheit
 Frost-free period: 210 to 240 days

Composition

Destazo gravelly clay loam, 2 to 4 percent slopes--40 percent
 Nowoy gravelly loamy fine sand, 2 to 4 percent slopes--30 percent
 Gullied land variable, 15 to 75 percent slopes--20 percent
 Yermo very gravelly sandy loam, 2 to 4 percent slopes--5 percent
 Wodavar extremely gravelly fine sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Destazo and similar soils

Landform: Flood plains
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: White burrobrush, wolfberry, Indian ricegrass, seepweed, creosotebush, white bursage, ephedra, cattle saltbush, shadscale

Typical profile:

Surface rock fragments: About 1 percent stones, 2 percent cobbles, 65 percent gravel
 Layer 1--0 to 11 inches; gravelly clay loam
 Layer 2--11 to 52 inches; very gravelly clay loam
 Layer 3--52 to 60 inches; clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Medium
 Permeability class (root zone): Moderately slow
 Available water capacity: About 6 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Nowoy and similar soils

Landform: Alluvial flats
 Parent material: Alluvium derived from mixed rocks over lacustrine deposits
 Typical vegetation: Indian ricegrass, Fremont dalea, seepweed, desertholly

Typical profile:

Surface rock fragments: Less than 1 percent cobbles, about 45 percent gravel

Layer 1--0 to 3 inches; gravelly loamy fine sand

Layer 2--3 to 20 inches; very gravelly sandy loam

Layer 3--20 to 60 inches; clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Low

Permeability class (root zone): Moderately slow

Available water capacity: About 9 inches

Present flooding: Rare

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Component Description**Gullied Land**

Landform: Drainageways

Component Properties and Qualities

Slope: 15 to 75 percent

Runoff: Medium

Interpretive Groups

Nonirrigated land capability: 8w

Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Yermo and similar soils**

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Inset fans

Typical vegetation: Wolfberry, cattle saltbush, white bursage, white burrobrush, creosotebush

Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Wodavar and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Lake terraces

Typical vegetation: Shadscale, desert needlegrass, Indian ricegrass

Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Engineering" and "Soil Properties" sections

2971--Upspring very gravelly sandy loam, 8 to 15 percent slopes***Map Unit Setting***

MLRA: 30

Landscape: Hills

Elevation: 3,000 to 4,200

Precipitation: 4 to 6 inches

Air temperature: 57 to 64 degrees Fahrenheit

Frost-free period: 235 to 250 days

Composition

Upspring very gravelly sandy loam, 8 to 15 percent slopes--85 percent

Haleburu Family extremely gravelly sandy loam, 8 to 30 percent slopes--10 percent

Rock outcrop--5 percent

Component Description**Upspring and similar soils**

Landform: Hills

Parent material: Colluvium derived from volcanic rocks over residuum weathered from volcanic rocks

Typical vegetation: Shadscale, white bursage, ephedra, winterfat, creosotebush, Anderson wolfberry, Indian ricegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 10 percent cobbles, 60 percent gravel

Layer 1--0 to 2 inches; very gravelly sandy loam

Layer 2--2 to 12 inches; very gravelly fine sandy loam

Layer 3--12 to 22 inches; unweathered bedrock

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 8 to 15 percent

Runoff: Very high

Depth to restrictive feature: Bedrock (lithic): 4 to 14 inches

Permeability class (root zone): Moderately rapid

Available water capacity: About 0.8 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA044NV--Loamy Hill 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Haleburu Family and similar soils

Composition: 0 to 10 percent
 Classification: Loamy-skeletal, mixed, superactive, calcareous, thermic Lithic Torriorthents
 Slope: 8 to 30 percent
 Landform: Hills
 Typical vegetation: White bursage, Anderson wolfberry, shadscale, desert needlegrass, spiny menodora, ephedra, Indian ricegrass
 Ecological site: 030XA044NV--Loamy Hill 5-8 P.Z.

Rock outcrop

Composition: 0 to 5 percent
 Landform: Hills
 Ecological site: None assigned

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

2990--Lealandic-Ashmed association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,500 to 2,900
 Precipitation: 3 to 9 inches
 Air temperature: 61 to 70 degrees Fahrenheit
 Frost-free period: 190 to 220 days

Composition

Lealandic very gravelly sandy loam, 2 to 4 percent slopes--60 percent
 Ashmed gravelly fine sandy loam, 2 to 4 percent slopes--30 percent
 Wodavar extremely gravelly fine sandy loam, 2 to 8 percent slopes--5 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--3 percent
 Arizo very gravelly loamy sand, 2 to 4 percent slopes--2 percent

Component Description

Lealandic and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: White bursage, shadscale, ephedra, creosotebush, wolfberry, Indian ricegrass, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent stones, 2 percent cobbles, 40 percent gravel
 Layer 1--0 to 5 inches; very gravelly sandy loam
 Layer 2--5 to 12 inches; gravelly sandy clay
 Layer 3--12 to 23 inches; very gravelly sandy clay
 Layer 4--23 to 40 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: High
 Depth to restrictive feature: Duripan: 20 to 40 inches
 Permeability class (root zone): Slow
 Available water capacity: About 2 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Component Description

Ashmed and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: White bursage, Indian ricegrass, desert needlegrass, creosotebush, Nevada ephedra, shadscale

Typical profile:

Surface rock fragments: About 10 percent cobbles, 60 percent gravel
 Layer 1--0 to 4 inches; gravelly fine sandy loam
 Layer 2--4 to 7 inches; gravelly silt loam
 Layer 3--7 to 24 inches; extremely gravelly sandy clay loam

Layer 4--24 to 32 inches; extremely gravelly coarse sandy loam
 Layer 5--32 to 60 inches; very gravelly coarse sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Medium
 Permeability class (root zone): Moderately slow
 Salinity: Saline within 40 inches
 Sodicty: Sodic within 40 inches
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA066NV--Calcareous Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Wodavar and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 8 percent
 Landform: Lake terraces
 Typical vegetation: Indian ricegrass, white bursage, creosotebush, desert needlegrass, shadscale, ephedra, wolfberry
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Yermo and similar soils

Composition: 0 to 3 percent
 Slope: 2 to 4 percent
 Landform: Inset fans
 Typical vegetation: Range ratany, desert needlegrass, white bursage, Indian ricegrass, creosotebush
 Ecological site: 030XA058NV--Limy 5-8 P.Z.

Arizo and similar soils

Composition: 0 to 2 percent
 Slope: 2 to 4 percent
 Landform: Drainageways
 Typical vegetation: White bursage, cattle saltbush, white burrobrush, creosotebush, Indian ricegrass
 Ecological site: 030XA065NV--Dry Wash 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

3021--Casaga-Destazo-Yurm complex, 2 to 8 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,400 to 3,600
 Precipitation: 3 to 6 inches
 Air temperature: 61 to 68 degrees Fahrenheit
 Frost-free period: 200 to 240 days

Composition

Casaga gravelly loam, 2 to 4 percent slopes--45 percent
 Destazo gravelly clay loam, 2 to 8 percent slopes--25 percent
 Yurm gravelly loam, 2 to 4 percent slopes--20 percent
 Nowoy gravelly sandy loam, 2 to 8 percent slopes--10 percent

Component Description

Casaga and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Indian ricegrass, shadscale, seepweed, Fremont dalea, desertholly

Typical profile:

Surface rock fragments: Less than 1 percent stones, 3 percent cobbles, about 65 percent gravel
 Layer 1--0 to 1 inches; gravelly loam
 Layer 2--1 to 21 inches; clay loam
 Layer 3--21 to 41 inches; very gravelly clay loam
 Layer 4--41 to 60 inches; stratified gravelly sandy loam to very gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: High
 Permeability class (root zone): Slow

Salinity: Saline within 40 inches
 Sodicity: Sodic within 40 inches
 Available water capacity: About 8 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Component Description

Destazo and similar soils

Landform: Flood plains
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: White bursage, creosotebush, wolfberry, Indian ricegrass, seepweed, cattle saltbush, ephedra, white burrobrush, shadscale

Typical profile:

Surface rock fragments: About 1 percent stones, 2 percent cobbles, 65 percent gravel
 Layer 1--0 to 11 inches; gravelly clay loam
 Layer 2--11 to 52 inches; very gravelly clay loam
 Layer 3--52 to 60 inches; clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: High
 Permeability class (root zone): Moderately slow
 Available water capacity: About 6 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Yurm and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Creosotebush, Indian ricegrass, shadscale

Typical profile:

Surface rock fragments: About 3 percent cobbles, 70 percent gravel

Layer 1--0 to 3 inches; gravelly loam
 Layer 2--3 to 16 inches; very gravelly sandy loam
 Layer 3--16 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 10 to 20 inches
 Permeability class (root zone): Moderate
 Salinity: Saline within 40 inches
 Available water capacity: About 1.2 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Nowoy and similar soils

Composition: 0 to 10 percent
 Slope: 2 to 8 percent
 Landform: Alluvial flats
 Typical vegetation: Shadscale, ephedra, creosotebush, Indian ricegrass, white bursage
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Engineering" and "Soil Properties" sections

3022--Casaga-Woda-Yermo association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,400 to 2,800
 Precipitation: 3 to 6 inches
 Air temperature: 57 to 68 degrees Fahrenheit

Frost-free period: 210 to 250 days

Composition

Casaga very gravelly loam, 2 to 4 percent slopes--40 percent

Woda sandy loam, 2 to 4 percent slopes--35 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--20 percent

Sezna gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description

Casaga and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desertholly, alkali sacaton, shadscale, creosotebush, inland saltgrass, white bursage, iodinebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, 3 percent cobbles, about 65 percent gravel

Layer 1--0 to 1 inches; very gravelly loam

Layer 2--1 to 21 inches; clay loam

Layer 3--21 to 41 inches; very gravelly clay loam

Layer 4--41 to 60 inches; stratified very gravelly sandy loam to gravelly clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: High

Permeability class (root zone): Slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 8 inches

Present flooding: Rare

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XY025NV--Sodic Flat

Component Description

Woda and similar soils

Landform: Fan remnants

Parent material: Alluvium derived from mixed rocks over lacustrine deposits

Typical vegetation: Indian ricegrass, Sierra chinkapin, seepweed, Fremont dalea

Typical profile:

Surface rock fragments: About 45 percent gravel

Layer 1--0 to 1 inches; sandy loam

Layer 2--1 to 10 inches; sandy loam

Layer 3--10 to 18 inches; gravelly clay loam

Layer 4--18 to 28 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very high

Depth to restrictive feature: Petrocalcic: 6 to 20 inches

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Available water capacity: About 2 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Desert needlegrass, bud sagebrush, shadscale, Nevada ephedra, creosotebush, Anderson wolfberry

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches
 Present flooding: Rare
 Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 030XA061NV--Loamy 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Sezna and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 4 percent
 Landform: Ballenas
 Typical vegetation: Seepweed, Sierra chinkapin, Fremont dalea, Indian ricegrass
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

3052--Bobnbob-Caslo complex, 0 to 4 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Bolson
 Elevation: 2,000 to 2,300
 Precipitation: 3 to 8 inches
 Air temperature: 58 to 63 degrees Fahrenheit
 Frost-free period: 210 to 240 days

Composition

Bobnbob silty clay loam, 0 to 4 percent slopes--65 percent
 Caslo silty clay loam, 0 to 2 percent slopes--20 percent
 Cobatus loam, 0 to 2 percent slopes--5 percent
 Aquic Haplocalcids silty clay loam, 0 to 2 percent slopes--5 percent
 Duric Torriorthents very gravelly sandy loam, 0 to 4 percent slopes--5 percent

Component Description

Bobnbob and similar soils

Landform: Flood plains
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Big saltbush, Baltic rush, rush, alkali sacaton, inland saltgrass

Typical profile:

Layer 1--0 to 7 inches; silty clay loam
 Layer 2--7 to 29 inches; stratified fine sandy loam to clay
 Layer 3--29 to 38 inches; silty clay loam
 Layer 4--38 to 52 inches; clay loam
 Layer 5--52 to 60 inches; sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: High
 Permeability class (root zone): Slow
 Salinity: Saline within 40 inches
 Available water capacity: About 11 inches
 Present flooding: Rare
 Water table: Present
 Natural drainage class: Somewhat poorly drained

Interpretive Groups

Irrigated land capability: 3w
 Nonirrigated land capability: 7w
 Ecological site: 030XY024NV--Saline Bottom

Component Description

Caslo and similar soils

Landform: Flood plains
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Rush, carex, common reed

Typical profile:

Layer 1--0 to 1 inches; silty clay loam
 Layer 2--1 to 10 inches; clay
 Layer 3--10 to 60 inches; stratified sandy loam to clay

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: High
 Permeability class (root zone): Slow
 Salinity: Saline within 40 inches
 Sodicity: Sodic within 40 inches
 Available water capacity: About 12 inches
 Present flooding: Occasional
 Water table: Present
 Natural drainage class: Poorly drained

Interpretive Groups

Nonirrigated land capability: 7w
 Ecological site: 030XY022NV--Wet Meadow

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Cobatus and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 2 percent
 Landform: Flood plains
 Typical vegetation: Inland saltgrass, Baltic rush, alkali sacaton, big saltbush, fourwing saltbush
 Ecological site: 030XY024NV--Saline Bottom

Aquic Haplocalcids and similar soils

Composition: 0 to 5 percent
 Classification: Fine-loamy, carbonatic, thermic Aquic Haplocalcids
 Slope: 0 to 2 percent
 Landform: Flood plains
 Typical vegetation: Baltic rush, alkali sacaton, inland saltgrass, big saltbush, fourwing saltbush, rubber rabbitbrush
 Ecological site: 030XY024NV--Saline Bottom

Duric Torriorthents and similar soils

Composition: 0 to 5 percent
 Classification: Loamy-skeletal, mixed, superactive, calcareous, thermic Duric Torriorthents
 Slope: 0 to 4 percent
 Landform: Lake terraces
 Typical vegetation: Inland saltgrass, Baltic rush, rush, alkali sacaton, big saltbush
 Ecological site: 030XY024NV--Saline Bottom

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Crops and Pasture" section

"Engineering" and "Soil Properties" sections

3101--Bluepoint-Besherm complex, 2 to 15 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Bolson
 Elevation: 2,400 to 2,700
 Precipitation: 3 to 7 inches
 Air temperature: 60 to 64 degrees Fahrenheit
 Frost-free period: 200 to 220 days

Composition

Bluepoint fine sand, 4 to 15 percent slopes--45 percent
 Besherm clay loam, 2 to 4 percent slopes--40 percent
 Nopah loam, 0 to 2 percent slopes--10 percent
 Duric Torriorthents gravelly sandy loam, 0 to 4 percent slopes--5 percent

Component Description

Bluepoint and similar soils

Landform: Dunes
 Parent material: Eolian sands
 Typical vegetation: Honey mesquite, white bursage, catclaw, fourwing saltbush, shadscale, creosotebush, Indian ricegrass, screwbean mesquite

Typical profile:

Layer 1--0 to 9 inches; fine sand
 Layer 2--9 to 17 inches; stratified fine sand to gravelly loamy fine sand
 Layer 3--17 to 41 inches; loamy fine sand
 Layer 4--41 to 60 inches; stratified sand to very fine sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 4 to 15 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 5 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XY045NV--Shallow Gravelly Loam 8-10 P.Z.

Component Description**Besherm and similar soils**

Landform: Lake plains

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Wolfberry, fourwing saltbush, Indian ricegrass, rubber rabbitbrush, spinescale saltbush, shadscale

Typical profile:

Layer 1--0 to 2 inches; clay loam

Layer 2--2 to 11 inches; clay

Layer 3--11 to 60 inches; clay

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent

Runoff: High

Permeability class (root zone): Slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 10 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Nopah and similar soils**

Composition: 0 to 10 percent

Slope: 0 to 2 percent

Landform: Flood plains

Typical vegetation: Alkali sacaton, shadscale, fourwing saltbush, cattle saltbush, wolfberry

Ecological site: 030XY040NV--Sodic Terrace 3-8 P.Z.

Duric Torriorthents and similar soils

Composition: 0 to 5 percent

Classification: Sandy, mixed, thermic Duric

Torriorthents

Slope: 0 to 4 percent

Landform: Lake terraces

Typical vegetation: Carex, rush, inland saltgrass, alkali sacaton

Ecological site: 030XY023NV--Saline Meadow

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

3120--Nowoy-Tanazza-Yurm association***Map Unit Setting***

MLRA: 30

Landscape: Intermontane basin

Elevation: 2,400 to 3,700

Precipitation: 3 to 6 inches

Air temperature: 61 to 68 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Nowoy gravelly loamy fine sand, 2 to 8 percent slopes--45 percent

Tanazza very gravelly fine sandy loam, 0 to 4 percent slopes--25 percent

Yurm very gravelly loam, 0 to 4 percent slopes--20 percent

Arizo Family very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Component Description**Nowoy and similar soils**

Landform: Alluvial flats

Parent material: Alluvium derived from mixed rocks over lacustrine deposits

Typical vegetation: Shadscale, ephedra, creosotebush, Indian ricegrass, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent cobbles, about 45 percent gravel

Layer 1--0 to 3 inches; gravelly loamy fine sand

Layer 2--3 to 20 inches; very gravelly sandy loam

Layer 3--20 to 60 inches; clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Available water capacity: About 9 inches
 Present flooding: Rare
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Tanazza and similar soils

Landform: Lake terraces
 Parent material: Lacustrine deposits
 Typical vegetation: Desertholly, seepweed, Indian ricegrass, wolfberry

Typical profile:

Surface rock fragments: About 1 percent cobbles, 30 percent gravel
 Layer 1--0 to 2 inches; very gravelly fine sandy loam
 Layer 2--2 to 15 inches; silt loam
 Layer 3--15 to 45 inches; silty clay loam
 Layer 4--45 to 60 inches; gypsiferous material

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: Medium
 Permeability class (root zone): Slow
 Available water capacity: About 8 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Component Description

Yurm and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Shadscale, Indian ricegrass, creosotebush

Typical profile:

Surface rock fragments: About 3 percent cobbles, 70 percent gravel
 Layer 1--0 to 3 inches; very gravelly loam
 Layer 2--3 to 16 inches; very gravelly sandy loam
 Layer 3--16 to 60 inches; cemented

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 10 to 20 inches
 Permeability class (root zone): Moderate
 Salinity: Saline within 40 inches
 Available water capacity: About 1.1 inches
 Present flooding: None
 Natural drainage class: Somewhat excessively drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Arizo Family and similar soils

Composition: 0 to 5 percent
 Classification: Sandy-skeletal, mixed, thermic Typic Torriorthents
 Slope: 2 to 4 percent
 Landform: Inset fans
 Typical vegetation: Creosotebush, big galleta, desert needlegrass, blackbrush, bush muhly, Nevada ephedra
 Ecological site: 030XB029NV--Shallow Gravelly Loam 5-7 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:
 "Range" section
 "Engineering" and "Soil Properties" sections

3150--Casaga gravelly loam, 2 to 4 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,000 to 2,500
 Precipitation: 4 to 6 inches
 Air temperature: 61 to 66 degrees Fahrenheit
 Frost-free period: 200 to 250 days

Composition

Casaga gravelly loam, 2 to 4 percent slopes--85 percent
 Nowoy gravelly sandy loam, 2 to 4 percent slopes--10 percent
 Bluepoint loamy fine sand, 0 to 4 percent slopes--5 percent

Component Description**Casaga and similar soils**

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Indian ricegrass, shadscale, white bursage

Typical profile:

Surface rock fragments: Less than 1 percent stones, 3 percent cobbles, about 65 percent gravel
 Layer 1--0 to 1 inches; gravelly loam
 Layer 2--1 to 21 inches; clay loam
 Layer 3--21 to 41 inches; very gravelly clay loam
 Layer 4--41 to 60 inches; stratified gravelly sandy loam to very gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 4 percent
 Runoff: High
 Permeability class (root zone): Slow
 Salinity: Saline within 40 inches
 Sodidity: Sodic within 40 inches
 Available water capacity: About 8 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Nowoy and similar soils**

Composition: 0 to 10 percent
 Slope: 2 to 4 percent
 Landform: Alluvial flats
 Typical vegetation: Creosotebush, white bursage, shadscale, ephedra, Indian ricegrass

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Bluepoint and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 4 percent
 Landform: Dunes
 Typical vegetation: White bursage, fourwing saltbush, shadscale, creosotebush, honey mesquite, screwbean mesquite, catclaw, Indian ricegrass
 Ecological site: 030XY045NV--Shallow Gravelly Loam 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

3230--Alko-Casaga association**Map Unit Setting**

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,400 to 2,600
 Precipitation: 3 to 7 inches
 Air temperature: 59 to 66 degrees Fahrenheit
 Frost-free period: 220 to 250 days

Composition

Alko sandy loam, 0 to 2 percent slopes--60 percent
 Casaga gravelly loam, 0 to 2 percent slopes--30 percent
 Arizo very gravelly sandy loam, 2 to 4 percent slopes--10 percent

Component Description**Alko and similar soils**

Landform: Fan remnants
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Shadscale, creosotebush, pricklypear, Indian ricegrass, sandpaper plant

Typical profile:

Surface rock fragments: About 2 percent cobbles, 50 percent gravel
 Layer 1--0 to 5 inches; sandy loam
 Layer 2--5 to 11 inches; coarse sandy loam
 Layer 3--11 to 33 inches; indurated
 Layer 4--33 to 60 inches; coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
Runoff: Very high
Depth to restrictive feature: Duripan: 5 to 20 inches
Permeability class (root zone): Moderately rapid
Salinity: Saline within 40 inches
Sodicity: Sodic within 40 inches
Available water capacity: About 1.1 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XA047NV--Barren Fan 3-8 P.Z.

Component Description

Casaga and similar soils

Landform: Fan remnants
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Creosotebush, desertholly, alkali sacaton, inland saltgrass, shadscale, white bursage, iodinebush

Typical profile:

Surface rock fragments: Less than 1 percent stones, about 3 percent cobbles, 65 percent gravel
Layer 1--0 to 1 inches; gravelly loam
Layer 2--1 to 21 inches; clay loam
Layer 3--21 to 41 inches; very gravelly clay loam
Layer 4--41 to 60 inches; stratified very gravelly sandy loam to gravelly clay loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
Runoff: High
Permeability class (root zone): Slow
Salinity: Saline within 40 inches
Sodicity: Sodic within 40 inches
Available water capacity: About 8 inches
Present flooding: Rare
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
Ecological site: 030XY025NV--Sodic Flat

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Arizo and similar soils

Composition: 0 to 10 percent
Slope: 2 to 4 percent
Landform: Drainageways
Typical vegetation: White bursage, white burrobrush, creosotebush, big galleta, desertwillow, hollyleaf bursage
Ecological site: 030XB028NV--Valley Wash

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Engineering" and "Soil Properties" sections

3252--Bobnbob-Cobatus complex, 0 to 2 percent slopes

Map Unit Setting

MLRA: 30
Landscape: Bolson
Elevation: 2,400 to 4,000
Precipitation: 4 to 8 inches
Air temperature: 57 to 63 degrees Fahrenheit
Frost-free period: 200 to 240 days

Composition

Bobnbob fine sandy loam, 0 to 2 percent slopes--70 percent
Cobatus loam, 0 to 2 percent slopes--15 percent
Aquic Haplocalcids silty clay loam, 0 to 4 percent slopes--10 percent
Duric Torriorthents very gravelly sandy loam, 0 to 4 percent slopes--5 percent

Component Description

Bobnbob and similar soils

Landform: Flood plains
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Alkali sacaton, carex, inland saltgrass, Baltic rush, rush

Typical profile:

Layer 1--0 to 7 inches; fine sandy loam
Layer 2--7 to 29 inches; stratified fine sandy loam to clay

Layer 3--29 to 38 inches; silty clay loam

Layer 4--38 to 52 inches; clay loam

Layer 5--52 to 60 inches; sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: High

Permeability class (root zone): Slow

Salinity: Saline within 40 inches

Available water capacity: About 11 inches

Present flooding: Occasional

Water table: Present

Natural drainage class: Somewhat poorly drained

Interpretive Groups

Irrigated land capability: 3w

Nonirrigated land capability: 7w

Ecological site: 030XY023NV--Saline Meadow

Component Description

Cobatus and similar soils

Landform: Lake plains

Parent material: Alluvium derived from mixed rocks over lacustrine deposits

Typical vegetation: Fourwing saltbush, big saltbush, inland saltgrass, Baltic rush, alkali sacaton

Typical profile:

Layer 1--0 to 2 inches; loam

Layer 2--2 to 14 inches; loam

Layer 3--14 to 60 inches; loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Medium

Permeability class (root zone): Moderately slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 11 inches

Present flooding: None

Water table: Present

Natural drainage class: Somewhat poorly drained

Interpretive Groups

Irrigated land capability: 3w

Nonirrigated land capability: 7w

Ecological site: 030XY024NV--Saline Bottom

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Aquic Haplocalcids and similar soils

Composition: 0 to 10 percent

Classification: Fine-loamy, carbonatic, thermic Aquic Haplocalcids

Slope: 0 to 4 percent

Landform: Flood plains

Typical vegetation: Mesquite, alkali sacaton, inland saltgrass, big saltbush

Ecological site: 030XY048NV--Lake Terrace

Duric Torriorthents and similar soils

Composition: 0 to 5 percent

Classification: Loamy-skeletal, mixed, superactive, calcareous, thermic Duric Torriorthents

Slope: 0 to 4 percent

Landform: Lake terraces

Typical vegetation: Alkali sacaton, inland saltgrass, shadscale, fourwing saltbush, wolfberry, cattle saltbush

Ecological site: 030XY040NV--Sodic Terrace 3-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

3302--Rumpah clay

Map Unit Setting

MLRA: 30

Landscape: Bolson

Elevation: 2,400 to 2,600

Precipitation: 3 to 5 inches

Air temperature: 61 to 64 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Rumpah clay, 0 to 2 percent slopes--90 percent

Besherm clay loam, 2 to 4 percent slopes--10 percent

Component Description

Rumpah and similar soils

Landform: Lake plains

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, shadscale, fourwing saltbush

Typical profile:

Layer 1--0 to 3 inches; clay

Layer 2--3 to 54 inches; clay

Layer 3--54 to 60 inches; clay

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Very high

Permeability class (root zone): Very slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 9 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 030XA070NV--Churning Clay 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Besherm and similar soils

Composition: 0 to 10 percent

Slope: 2 to 4 percent

Landform: Lake plains

Typical vegetation: Shadscale, cattle saltbush, white burrobrush, pale wolfberry, inland saltgrass, white bursage

Ecological site: 030XA057NV--Dry Sodic Terrace 5-8 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

3313--Besherm clay loam

Map Unit Setting

MLRA: 30

Landscape: Bolson

Elevation: 2,400 to 2,700

Precipitation: 3 to 5 inches

Air temperature: 61 to 64 degrees Fahrenheit

Frost-free period: 200 to 220 days

Composition

Besherm clay loam, 0 to 2 percent slopes--85 percent

Nowoy clay loam, 0 to 2 percent slopes--6 percent

Nopah loam, 0 to 2 percent slopes--5 percent

Rumpah clay, 0 to 2 percent slopes--4 percent

Component Description

Besherm and similar soils

Landform: Lake plains

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Indian ricegrass, rubber rabbitbrush, spinescale saltbush, shadscale, fourwing saltbush, wolfberry

Typical profile:

Layer 1--0 to 2 inches; clay loam

Layer 2--2 to 11 inches; clay

Layer 3--11 to 60 inches; clay

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: High

Permeability class (root zone): Slow

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 10 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 3s

Nonirrigated land capability: 7s

Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Nowoy and similar soils**

Composition: 0 to 6 percent

Slope: 0 to 2 percent

Landform: Flood plains

Typical vegetation: Alkali sacaton, fourwing saltbush, shadscale

Ecological site: 030XA097NV--Clayey Terrace 5-8 P.Z.

Nopah and similar soils

Composition: 0 to 5 percent

Slope: 0 to 2 percent

Landform: Flood plains

Typical vegetation: Other shrubs, wolfberry, rubber rabbitbrush, spinescale saltbush, Torrey quailbush, shadscale, fourwing saltbush, Indian ricegrass

Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Rumpah and similar soils

Composition: 0 to 4 percent

Slope: 0 to 2 percent

Landform: Lake plains

Typical vegetation: Fourwing saltbush, Indian ricegrass, shadscale

Ecological site: 030XA070NV--Churning Clay 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

3320--Haymont very fine sandy loam, 0 to 2 percent slopes**Map Unit Setting**

MLRA: 30

Landscape: Bolson

Elevation: 2,500 to 2,700

Precipitation: 3 to 7 inches

Air temperature: 61 to 64 degrees Fahrenheit

Frost-free period: 200 to 240 days

Composition

Haymont very fine sandy loam, 0 to 2 percent slopes--85 percent

Sanwell loam, 0 to 2 percent slopes--5 percent

Nopah loam, 2 to 4 percent slopes--5 percent

Nowoy gravelly sandy loam, 2 to 8 percent slopes--5 percent

Component Description**Haymont and similar soils**

Landform: Alluvial flats

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Other perennial forbs, other perennial grasses, Torrey quailbush, spinescale saltbush, seepweed, winterfat, other annual forbs, Indian ricegrass, shadscale, fourwing saltbush

Typical profile:

Layer 1--0 to 3 inches; very fine sandy loam

Layer 2--3 to 40 inches; stratified very fine sandy loam to silt loam

Layer 3--40 to 60 inches; stratified fine sandy loam to silt loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent

Runoff: Low

Permeability class (root zone): Moderate

Salinity: Saline within 40 inches

Sodicity: Sodic within 40 inches

Available water capacity: About 10 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 3s

Nonirrigated land capability: 7s

Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Sanwell overwash and similar soils**

Composition: 0 to 5 percent

Slope: 0 to 2 percent

Landform: Alluvial flats

Typical vegetation: Seepweed, other perennial grasses, other perennial forbs, winterfat, Torrey quailbush, Indian ricegrass, fourwing saltbush, spinescale saltbush, shadscale, other annual forbs

Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Nopah and similar soils

Composition: 0 to 5 percent

Slope: 2 to 4 percent

Landform: Alluvial flats

Typical vegetation: Seepweed, other shrubs, Indian ricegrass, creosotebush, white burrobrush, cattle saltbush, shadscale, white bursage
Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Nowoy and similar soils

Composition: 0 to 5 percent
Slope: 2 to 8 percent
Landform: Alluvial flats
Typical vegetation: Creosotebush, Indian ricegrass, white bursage, desert alysum
Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Crops and Pasture" section
"Engineering" and "Soil Properties" sections

3333--Nopah loam

Map Unit Setting

MLRA: 30
Landscape: Bolson
Elevation: 2,500 to 2,700
Precipitation: 3 to 5 inches
Air temperature: 61 to 64 degrees Fahrenheit
Frost-free period: 200 to 220 days

Composition

Nopah loam, 0 to 2 percent slopes--85 percent
Besherm clay loam, 0 to 2 percent slopes--5 percent
Bobnbob silty clay loam, 0 to 2 percent slopes--5 percent
Nowoy loam, 0 to 2 percent slopes--5 percent

Component Description

Nopah and similar soils

Landform: Alluvial flats
Parent material: Alluvium derived from mixed rock sources
Typical vegetation: Rubber rabbitbrush, shadscale, fourwing saltbush, other shrubs, wolfberry, spinescale saltbush, Torrey quailbush, Indian ricegrass

Typical profile:

Layer 1--0 to 6 inches; loam
Layer 2--6 to 60 inches; stratified loam to clay

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
Runoff: High
Permeability class (root zone): Slow
Salinity: Saline within 40 inches
Available water capacity: About 12 inches
Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 3s
Nonirrigated land capability: 7s
Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Besherm and similar soils

Composition: 0 to 5 percent
Slope: 0 to 2 percent
Landform: Lake plains
Typical vegetation: Indian ricegrass, wolfberry, rubber rabbitbrush, shadscale, spinescale saltbush, fourwing saltbush
Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Bobnbob drained and similar soils

Composition: 0 to 5 percent
Slope: 0 to 2 percent
Landform: Flood plains
Typical vegetation: Basin wildrye, fourwing saltbush, mesquite, alkali sacaton
Ecological site: 030XA064NV--Loamy Bottom 3-8 P.Z.

Nowoy and similar soils

Composition: 0 to 5 percent
Slope: 0 to 2 percent
Landform: Alluvial flats
Typical vegetation: Cattle saltbush, fourwing saltbush, Indian ricegrass, spinescale saltbush, rubber rabbitbrush, wolfberry, other shrubs, shadscale
Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

4010--Tanazza-Wechech-Wodavar association

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,500 to 2,800
 Precipitation: 3 to 7 inches
 Air temperature: 59 to 67 degrees Fahrenheit
 Frost-free period: 200 to 240 days

Composition

Tanazza fine sandy loam, 2 to 8 percent slopes--35 percent
 Wechech very gravelly sandy loam, 2 to 8 percent slopes--35 percent
 Wodavar extremely gravelly fine sandy loam, 2 to 8 percent slopes--15 percent
 Typic Haplocalcids gravelly loamy sand, 4 to 15 percent slopes--6 percent
 Typic Haplocalcids gravelly loamy sand, 2 to 8 percent slopes--6 percent
 Bluepoint fine sand, 0 to 4 percent slopes--3 percent

Component Description

Tanazza and similar soils

Landform: Lake terraces
 Parent material: Lacustrine deposits
 Typical vegetation: Indian ricegrass, white bursage, shadscale, big galleta

Typical profile:

Surface rock fragments: About 1 percent cobbles, 30 percent gravel
 Layer 1--0 to 2 inches; fine sandy loam
 Layer 2--2 to 15 inches; silt loam
 Layer 3--15 to 45 inches; silty clay loam
 Layer 4--45 to 60 inches; gypsiferous material

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: High
 Permeability class (root zone): Slow
 Available water capacity: About 8 inches
 Present flooding: None

Present ponding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c
 Ecological site: 030XY049NV--Breaks 3-8 P.Z.

Component Description

Wechech and similar soils

Landform: Summits of fan remnants
 Parent material: Alluvium derived from limestone and dolomite
 Typical vegetation: Big galleta, Indian ricegrass, creosotebush, winterfat, range ratany, ephedra, white bursage

Typical profile:

Surface rock fragments: About 1 percent cobbles, 45 percent gravel
 Layer 1--0 to 2 inches; very gravelly sandy loam
 Layer 2--2 to 13 inches; very gravelly sandy loam
 Layer 3--13 to 17 inches; indurated

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 8 to 14 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.9 inches
 Present flooding: None
 Present ponding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XB102NV--Gravelly Loam 5-7 P.Z.

Component Description

Wodavar and similar soils

Landform: Lake terraces
 Parent material: Lacustrine deposits
 Typical vegetation: Indian ricegrass, white bursage, shadscale, creosotebush, wolfberry

Typical profile:

Surface rock fragments: About 1 percent cobbles, 65 percent gravel
 Layer 1--0 to 3 inches; extremely gravelly fine sandy loam

Layer 2--3 to 16 inches; very gravelly sandy loam
 Layer 3--16 to 33 inches; indurated
 Layer 4--33 to 60 inches; very gravelly loam

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 2 to 8 percent
 Runoff: Very high
 Depth to restrictive feature: Petrocalcic: 10 to 20
 inches
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 0.9 inches
 Present flooding: None
 Present ponding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s
 Ecological site: 030XA066NV--Calcareous Loam 5-7
 P.Z.

Typical soil descriptions including ranges in
 characteristics are in the "Classification of the Soils"
 section.

Contrasting Inclusions

Typic Haplocalcids sloping and similar soils

Composition: 0 to 6 percent
 Classification: Fine-loamy, mixed, superactive,
 thermic Typic Haplocalcids
 Slope: 4 to 15 percent
 Landform: Alluvial flats, fan remnants
 Typical vegetation: Indian ricegrass, creosotebush,
 desert needlegrass, shadscale
 Ecological site: 030XA053NV--Calcareous Loam 3-5
 P.Z.

Typic Haplocalcids and similar soils

Composition: 0 to 6 percent
 Classification: Fine, mixed, superactive, thermic Typic
 Haplocalcids
 Slope: 2 to 8 percent
 Landform: Alluvial flats, fan remnants
 Typical vegetation: Indian ricegrass, wolfberry, white
 bursage, shadscale, desert needlegrass
 Ecological site: 030XA050NV--Loamy 3-5 P.Z.

Bluepoint and similar soils

Composition: 0 to 3 percent
 Slope: 0 to 4 percent
 Landform: Sand sheets

Typical vegetation: Indian ricegrass, screwbean
 mesquite, honey mesquite, creosotebush, shadscale,
 fourwing saltbush, white bursage, catclaw
 Ecological site: 030XY045NV--Shallow Gravelly Loam
 8-10 P.Z.

Management

For information about managing this map unit, see
 the following sections and associated tables in Part II
 of this publication:

"Range" section
 "Engineering" and "Soil Properties" sections

4030--Wechech-Nopah-Yermo association

Map Unit Setting

MLRA: 30
 Landscape: Fan piedmont
 Elevation: 2,500 to 2,900
 Precipitation: 3 to 7 inches
 Air temperature: 60 to 64 degrees Fahrenheit
 Frost-free period: 200 to 230 days

Composition

Wechech gravelly loam, 0 to 4 percent slopes--45
 percent
 Nopah loam, 0 to 4 percent slopes--20 percent
 Yermo very gravelly sandy loam, 0 to 4 percent
 slopes--20 percent
 Tanazza very gravelly fine sandy loam, 2 to 8 percent
 slopes--10 percent
 Corbitt gravelly fine sandy loam, 0 to 2 percent
 slopes--5 percent

Component Description

Wechech and similar soils

Landform: Fan remnants
 Parent material: Alluvium derived from limestone and
 dolomite
 Typical vegetation: Creosotebush, white bursage,
 shadscale, ephedra, range ratany, wolfberry, Indian
 ricegrass, Fremont dalea, desert needlegrass

Typical profile:

Surface rock fragments: About 1 percent cobbles, 45
 percent gravel
 Layer 1--0 to 2 inches; gravelly loam
 Layer 2--2 to 7 inches; very gravelly sandy loam
 Layer 3--7 to 11 inches; indurated

See "Chemical Properties of Soils" table and the
 "Physical Properties of Soils" table for more
 information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Very high

Depth to restrictive feature: Petrocalcic: 7 to 20 inches

Permeability class (root zone): Moderate

Available water capacity: About 0.7 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Component Description

Nopah and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Seepweed, other shrubs, Indian ricegrass, creosotebush, white burrobrush, cattle saltbush, shadscale, white bursage

Typical profile:

Layer 1--0 to 6 inches; loam

Layer 2--6 to 60 inches; stratified loam to clay

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: High

Permeability class (root zone): Slow

Salinity: Saline within 40 inches

Available water capacity: About 12 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 3s

Nonirrigated land capability: 7s

Ecological site: 030XA053NV--Calcareous Loam 3-5 P.Z.

Component Description

Yermo and similar soils

Landform: Inset fans

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: White bursage, shadscale, creosotebush, wolfberry, desert needlegrass, Indian ricegrass

Typical profile:

Surface rock fragments: About 2 percent cobbles, 60 percent gravel

Layer 1--0 to 6 inches; very gravelly sandy loam

Layer 2--6 to 60 inches; stratified gravelly loam to extremely gravelly sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Very low

Permeability class (root zone): Moderately rapid

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Tanazza and similar soils

Composition: 0 to 10 percent

Slope: 2 to 8 percent

Landform: Lake terraces

Typical vegetation: Big galleta, creosotebush, white bursage, white burrobrush, Indian ricegrass

Ecological site: 030XB038NV--Gravelly Gypsic Loam 5-8 P.Z.

Corbilt and similar soils

Composition: 0 to 5 percent

Slope: 0 to 2 percent

Landform: Alluvial fans

Typical vegetation: Creosotebush, white bursage, desert needlegrass, Indian ricegrass

Ecological site: 030XA073NV--Limy 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

4060--Besherm-Tanazza association

Map Unit Setting

MLRA: 30
 Landscape: Bolson
 Elevation: 2,500 to 2,700
 Precipitation: 3 to 6 inches
 Air temperature: 61 to 64 degrees Fahrenheit
 Frost-free period: 200 to 220 days

Composition

Besherm clay loam, 0 to 2 percent slopes--70 percent
 Tanazza silt loam, 0 to 2 percent slopes--15 percent
 Bobnbob silty clay loam, 0 to 2 percent slopes--10 percent
 Nopah loam, 0 to 2 percent slopes--5 percent

Component Description

Besherm and similar soils

Landform: Lake plains
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Indian ricegrass, wolfberry, rubber rabbitbrush, shadscale, spinescale saltbush, fourwing saltbush

Typical profile:

Layer 1--0 to 2 inches; clay loam
 Layer 2--2 to 11 inches; clay
 Layer 3--11 to 60 inches; clay

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: High
 Permeability class (root zone): Slow
 Salinity: Saline within 40 inches
 Sodicity: Sodic within 40 inches
 Available water capacity: About 10 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 4s
 Nonirrigated land capability: 7s
 Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Component Description

Tanazza and similar soils

Landform: Lake terraces
 Parent material: Lacustrine deposits
 Typical vegetation: White bursage, big galleta, white burrobrush, creosotebush, Indian ricegrass

Typical profile:

Surface rock fragments: About 1 percent cobbles, 30 percent gravel
 Layer 1--0 to 2 inches; silt loam
 Layer 2--2 to 15 inches; silt loam
 Layer 3--15 to 45 inches; silty clay loam
 Layer 4--45 to 60 inches; gypsiferous material

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 2 percent
 Runoff: Medium
 Permeability class (root zone): Slow
 Available water capacity: About 9 inches
 Present flooding: None
 Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c
 Ecological site: 030XB038NV--Gravelly Gypsic Loam 5-8 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Bobnbob drained and similar soils

Composition: 0 to 10 percent
 Slope: 0 to 2 percent
 Landform: Flood plains
 Typical vegetation: Alkali sacaton, basin wildrye, mesquite, fourwing saltbush
 Ecological site: 030XA064NV--Loamy Bottom 3-8 P.Z.

Nopah and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 2 percent
 Landform: Alluvial flats
 Typical vegetation: Torrey quailbush, other shrubs, fourwing saltbush, shadscale, spinescale saltbush, rubber rabbitbrush, wolfberry, Indian ricegrass

Ecological site: 030XA062NV--Silt Flat 3-5 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section

"Crops and Pasture" section

"Engineering" and "Soil Properties" sections

4070--Gynelle-Kawich-Cirac complex, 0 to 30 percent slopes

Map Unit Setting

MLRA: 30

Landscape: Bolson

Elevation: 4,100 to 5,500

Precipitation: 3 to 9 inches

Air temperature: 50 to 57 degrees Fahrenheit

Frost-free period: 130 to 160 days

Composition

Gynelle very gravelly loamy sand, 0 to 4 percent slopes--35 percent

Kawich fine sand, 15 to 30 percent slopes--25 percent

Cirac gravelly sandy loam, 0 to 4 percent slopes--25 percent

Yermo very gravelly sandy loam, 2 to 4 percent slopes--5 percent

Casaga gravelly loam, 0 to 4 percent slopes--5 percent

Purob gravelly sandy loam, 4 to 15 percent slopes--5 percent

Component Description

Gynelle and similar soils

Landform: Alluvial flats

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Nevada ephedra, galleta, Bailey greasewood, shadscale, Indian ricegrass, spiny menodora

Typical profile:

Surface rock fragments: About 3 percent cobbles, 45 percent gravel

Layer 1--0 to 3 inches; very gravelly loamy sand

Layer 2--3 to 60 inches; stratified very gravelly sandy loam to extremely cobbly coarse sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent

Runoff: Negligible

Permeability class (root zone): Rapid

Sodicity: Sodic within 40 inches

Available water capacity: About 2 inches

Present flooding: Rare

Natural drainage class: Somewhat excessively drained

Interpretive Groups

Irrigated land capability: 4s

Nonirrigated land capability: 7s

Ecological site: 029XY036NV--Cobbly Loam 5-8 P.Z.

Component Description

Kawich and similar soils

Landform: Dunes

Parent material: Eolian sands

Typical vegetation: Fourwing saltbush, Indian ricegrass, black greasewood, horsebrush, needleandthread

Typical profile:

Layer 1--0 to 2 inches; fine sand

Layer 2--2 to 60 inches; fine sand

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 15 to 30 percent

Runoff: Low

Permeability class (root zone): Very rapid

Salinity: Saline within 40 inches

Available water capacity: About 4 inches

Present flooding: None

Natural drainage class: Excessively drained

Interpretive Groups

Nonirrigated land capability: 7s

Ecological site: 027XY016NV--Sodic Dunes

Component Description

Cirac and similar soils

Landform: Alluvial flats

Parent material: Alluvium derived from mixed rock sources

Typical vegetation: Seepweed, alkali sacaton, black greasewood, Indian ricegrass, shadscale, inland saltgrass, white burrobrush, rubber rabbitbrush, fourwing saltbush

Typical profile:

Surface rock fragments: About 40 percent gravel

Layer 1--0 to 4 inches; gravelly sandy loam
 Layer 2--4 to 60 inches; stratified gravelly sand to silt loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Salinity: Saline within 40 inches
 Sodicty: Sodic within 40 inches
 Available water capacity: About 7 inches
 Present flooding: Rare
 Natural drainage class: Well drained

Interpretive Groups

Irrigated land capability: 6s
 Nonirrigated land capability: 7s
 Ecological site: 027XY025NV--Sodic Flat

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions

Yermo flooded and similar soils

Composition: 0 to 5 percent
 Slope: 2 to 4 percent
 Landform: Drainageways
 Typical vegetation: White bursage, hollyleaf bursage, desertwillow, white burrobrush, big galleta, creosotebush
 Ecological site: 030XB028NV--Valley Wash

Casaga and similar soils

Composition: 0 to 5 percent
 Slope: 0 to 4 percent
 Landform: Alluvial flats
 Typical vegetation: Shadscale, Indian ricegrass, Fremont dalea, seepweed, desertholly
 Ecological site: 030XA060NV--Gypsic Loam 3-5 P.Z.

Purob and similar soils

Composition: 0 to 5 percent
 Slope: 4 to 15 percent
 Landform: Fan remnants
 Typical vegetation: Indian ricegrass, bush muhly, pale wolfberry, Nevada ephedra, blackbrush, big galleta
 Ecological site: 030XB014NV--Shallow Gravelly Loam 7-9 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
 "Crops and Pasture" section
 "Engineering" and "Soil Properties" sections

4071--Corbilt gravelly loamy fine sand, 0 to 4 percent slopes

Map Unit Setting

MLRA: 30
 Landscape: Intermontane basin
 Elevation: 2,700 to 3,000
 Precipitation: 3 to 7 inches
 Air temperature: 61 to 68 degrees Fahrenheit
 Frost-free period: 200 to 220 days

Composition

Corbilt gravelly loamy fine sand, 0 to 4 percent slopes--85 percent
 Nowoy gravelly loamy fine sand, 2 to 4 percent slopes--6 percent
 Pahump loamy fine sand, 0 to 4 percent slopes--5 percent
 Bluepoint loamy fine sand, 4 to 15 percent slopes--4 percent

Component Description

Corbilt and similar soils

Landform: Fan skirts
 Parent material: Alluvium derived from mixed rock sources
 Typical vegetation: Sand dropseed, Indian ricegrass, creosotebush, white bursage, big galleta

Typical profile:

Surface rock fragments: Less than 1 percent stones, less than 1 percent cobbles, about 35 percent gravel
 Layer 1--0 to 4 inches; gravelly loamy fine sand
 Layer 2--4 to 60 inches; gravelly fine sandy loam

See "Chemical Properties of Soils" table and the "Physical Properties of Soils" table for more information.

Component Properties and Qualities

Slope: 0 to 4 percent
 Runoff: Very low
 Permeability class (root zone): Moderately rapid
 Available water capacity: About 7 inches

Present flooding: None
Natural drainage class: Well drained

Interpretive Groups

Nonirrigated land capability: 7c
Ecological site: 030XB037NV--Limy Sand 5-7 P.Z.

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Contrasting Inclusions**Nowoy and similar soils**

Composition: 0 to 6 percent
Slope: 2 to 4 percent
Landform: Inset fans
Typical vegetation: Indian ricegrass, cattle saltbush, white bursage, creosotebush
Ecological site: 030XY046NV--Outwash Plain

Pahrump sandy surface and similar soils

Composition: 0 to 5 percent
Slope: 0 to 4 percent
Landform: Fan skirts
Typical vegetation: Winterfat, Indian ricegrass, dropseed, Nevada ephedra, range ratany, white bursage, big galleta
Ecological site: 030XB004NV--Sandy 5-7 P.Z.

Bluepoint and similar soils

Composition: 0 to 4 percent
Slope: 4 to 15 percent
Landform: Dunes
Typical vegetation: Creosotebush, catclaw, white bursage, fourwing saltbush, shadscale, Indian ricegrass, honey mesquite, screwbean mesquite
Ecological site: 030XY045NV--Shallow Gravelly Loam 8-10 P.Z.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Range" section
"Crops and Pasture" section
"Engineering" and "Soil Properties" sections

4080--Water***Map Unit Setting***

MLRA: 29
Landscape: Bolson
Elevation: 2,000 to 5,700

Composition

Water--100 percent

Component Description**Water**

Landform: Depressions

Interpretive Groups

Nonirrigated land capability: Not determined
Ecological site: None assigned

Typical soil descriptions including ranges in characteristics are in the "Classification of the Soils" section.

Management

For information about managing this map unit, see the following sections and associated tables in Part II of this publication:

"Engineering" and "Soil Properties" sections

Prime Farmland

Prime Farmland and Other Important Farmland

In this section, prime farmland and other important farmland are defined. The map units in the survey area that are considered prime farmland are listed under "Prime Farmland Map Units" at the end of this section.

Prime Farmland

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. The acreage of high-quality farmland is limited, and the U.S. Department of Agriculture recognizes that government at local, State, and Federal levels, as well as individuals, must encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland soils, as defined by the U.S. Department of Agriculture, are soils that are best suited to food, seed, forage, fiber, and oilseed crops. Such soils have properties that favor the economic production of sustained high yields of crops. The soils need only to be treated and managed by acceptable farming methods. An adequate moisture supply and a sufficiently long growing season are required. Prime farmland soils produce the highest yields with minimal expenditure of energy and economic resources, and farming these soils results in the least damage to the environment.

Prime farmland soils may presently be used as cropland, pasture, woodland or for other purposes. They are used for food and fiber or are available for these uses. Urban or built-up land and water areas cannot be considered prime farmland. Urban or built-up land is any contiguous unit of 10 acres or more in size that is used for such purposes as housing, industrial, and commercial sites, sites for institutions or public buildings, small parks, golf courses, cemeteries, railroad yards, airports, sanitary landfills, sewage treatment plants, and water-control structures.

Prime farmland soils commonly receive an adequate and dependable supply of moisture from precipitation or

irrigation. The temperature and growing season are favorable, and the level of acidity or alkalinity and the content of salts and sodium are acceptable. The soils have few, if any, rocks and are permeable to water and air. They are not excessively erodible or saturated with water for long periods, and they are not frequently flooded during the growing season or are protected from flooding. Slopes range mainly from 0 to 6 percent.

Soils that have a high water table, are subject to flooding, or are droughty may qualify as prime farmland where these limitations are overcome by drainage measures, flood control, or irrigation. Onsite evaluation is necessary to determine the effectiveness of corrective measures. More information about the criteria for prime farmland can be obtained at the local office of the Natural Resources Conservation Service.

A recent trend in land use has been the conversion of prime farmland to urban and industrial uses. The loss of prime farmland to other uses puts pressure on lands that are less productive than prime farmland.

No soils in the Nye County, Nevada, Southwest Part survey area, meet the requirements for prime farmland.

Unique Farmland

Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops. It has the special combination of soil qualities, location, growing season, and moisture supply needed for the economic production of sustained high yields of a specific high-quality crop when treated and managed by acceptable farming methods. Examples of such crops are citrus, tree nuts, olives, cranberries, and vegetables.

Unique farmland is used for a specific high-value food or fiber crop; has an adequate supply of available moisture for the specific crop because of stored moisture, precipitation, or irrigation; and has a combination of soil qualities, growing season, temperature, humidity, air drainage, elevation, aspect, and other factors, such as nearness to markets, that favor the production of a specific food or fiber crop.

Lists of unique farmland are developed as needed in cooperation with conservation districts and other entities. There are presently no soils recognized as unique farmland in Nevada.

Additional Farmland of Statewide Importance

Some areas other than areas of prime and unique farmland are of statewide importance in the production of food, feed, fiber, forage, and oilseed crops. The criteria used in defining and delineating these areas are determined by the appropriate State agency or agencies. Generally, additional farmland of statewide importance includes areas that nearly meet the criteria for prime farmland and that economically produce high yields of

crops when treated and managed by acceptable farming methods. Some areas can produce as high a yield as areas of prime farmland if conditions are favorable. In some states additional farmland of statewide importance may include tracts of land that have been designated for agriculture by State law.

Nevada has designated any farmland that is irrigated to be of statewide importance.

Prime Farmland Map Units

The following map units are prime farmland where irrigated with an adequate and dependable water supply:

There are no prime farmland map units in this survey area.

Classification of the Soils

The system of soil classification used by the National Cooperative Soil Survey has six categories. Beginning with the broadest, these categories are the order, suborder, great group, subgroup, family, and series. Classification is based on soil properties observed in the field or inferred from those observations or from laboratory measurements. Table 16, "Classification of the Soils," in Part II of this Publication shows the classification of the soils in the survey area. The categories are defined in the following paragraphs.

ORDER. Eleven soil orders are recognized. The differences among orders reflect the dominant soil-forming processes and the degree of soil formation. Each order is identified by a word ending in *sol*. An example is *Aridisol*.

SUBORDER. Each order is divided into suborders primarily on the basis of properties that influence soil genesis and are important to plant growth or properties that reflect the most important variables within the orders. The last syllable in the name of a suborder indicates the order. An example is *Argid* (*Arg*, meaning presence of an argillic horizon plus *id*, from *Aridisol*).

GREAT GROUP. Each suborder is divided into great groups on the basis of close similarities in kind, arrangement, and degree of development of pedogenic horizons; soil moisture and temperature regimes; and base status. Each great group is identified by the name of a suborder and by a prefix that indicates a property of the soil. An example is *Haplargid*. (*Hapl*, meaning minimum development, plus *argid*, the suborder of the *Aridisols* that have an argillic horizon).

SUBGROUP. Each great group has a typic subgroup. Other subgroups are intergrades or extragrades. The typic is the central concept of the great group; it is not necessarily the most extensive. Intergrades are transitions to other orders, suborders, or great groups. Extragrades have some properties that are not representative of the great group but do not indicate transitions to any other known kind of soil. Each subgroup is identified by one or more adjectives preceding the name of the great group. The adjective *Typic* identifies the subgroup that typifies the great

group. An example is *Typic Haplargids*.

FAMILY. Families are established within a subgroup on the basis of physical and chemical properties and other characteristics that affect management. Generally, the properties are those of horizons below plow depth where there is much biological activity. Among the properties and characteristics considered are particle-size class, mineral content, temperature regime, thickness of the root zone, consistence, moisture equivalent, slope, and permanent cracks. A family name consists of the name of a subgroup preceded by terms that indicate soil properties. An example is *loamy-skeletal, mixed, superactive, mesic, Typic Haplargids*.

SERIES. The series consists of soils that have similar horizons in their profile. The horizons are similar in color, texture, structure, reaction, consistence, mineral and chemical composition, and arrangement in the profile. The texture of the surface layer or of the substratum can differ within a series. An example is the *Stonell Series*, a member of the *loamy-skeletal, mixed, superactive, mesic Typic Haplargids* family.

Taxonomic Units and Their Morphology

In this section, each taxonomic unit recognized in the survey area is described. The descriptions are arranged in alphabetic order.

Characteristics of the soil and the material in which it formed are identified for each unit. A pedon, a small three-dimensional area of soil, that is typical of the unit in the survey area is described. The detailed description of each soil horizon follow standards in the "Soil Survey Manual" (7). Many of the technical terms used in the descriptions are defined in "Soil Taxonomy" (8). Unless otherwise stated, colors in the descriptions are for dry soil. Following the pedon description is the range of important characteristics of the soils in the unit.

The map units of each taxonomic unit are described in the section "Detailed Soil Map Units".

Advokay series

The Advokay series consists of very shallow and shallow, well drained soils that formed in residuum and colluvium derived from mixed rocks. Advokay soils are on hills. Slopes are 4 to 15 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy, mixed, superactive, mesic, shallow Typic Haplargids

Typical pedon: Advokay gravelly sandy loam, in map unit 2641. (Colors are for dry soil unless otherwise noted.) The surface is partially covered with approximately 50 percent pebbles.

A1--0 to 1 inch; pale brown (10YR 6/3) gravelly sandy loam, brown (10YR 4/3) moist; moderate medium platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine and fine vesicular and interstitial pores; 25 percent pebbles; strongly effervescent; moderately alkaline (pH 7.9); abrupt smooth boundary.

A2--1 to 3 inches; pale brown (10YR 6/3) coarse sandy loam, brown (10YR 4/3) moist; strong very thick platy structure parting to moderate medium subangular blocky; slightly hard, very friable, slightly sticky and nonplastic; few very fine roots; many very fine and fine vesicular pores; 10 percent pebbles; few thin clay films in pores in the lower part of the horizon; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Btkq--3 to 7 inches; light yellowish brown (10YR 6/4) gravelly sandy clay loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure; slightly hard, very friable, slightly sticky and plastic; common very fine and fine, and few medium roots; many very fine tubular and interstitial pores; 25 percent pebbles; common thin clay films lining pores; common thin lime and silica pendants on pebbles; strongly effervescent; moderately alkaline (pH 8.0); abrupt wavy boundary.

Cr--7 inches; weathered, very highly fractured tuffaceous rock; few very fine roots in fractures.

Type location: Nye County, Nevada; approximately 5 miles southeast of Goldfield, about 1,000 feet south and 2,200 feet west of the projected northeast corner of section 23, T.3 S., R.43 E.; (37 degrees, 40 minutes, 15 seconds north latitude and 117 degrees, 07 minutes, 19 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring and from 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to paralithic: 4 to 14 inches.

Reaction: Slightly alkaline or moderately alkaline.

Effervescence: Calcareous, ranges from slightly effervescent to violently effervescent.

Control section:

Clay content--18 to 27 percent.

Rock fragments--15 to 35 percent mainly 2 to 5 millimeters in diameter.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Btkq horizon:

Value--5 or 6 dry, 3 through 5 moist.

Chroma--3 or 4.

Clay content--20 to 35 percent.

Rock fragments--15 to 35 percent, mainly 2 to 5 millimeters diameter. Subhorizons may range from 10 to 45 percent in some pedons.

Other features--Lime and silica pendants are common on pebbles in most pedons.

Agon series

The Agon series consists of moderately deep, well drained soils over a thin hardpan underlain by bedrock on. Agon soils are on rock pediments that formed in alluvium derived from mixed rocks. Slopes are 2 to 4 percent. Mean annual precipitation is about 7 inches and mean annual temperature is about 60 degrees F.

Taxonomic class: Sandy, mixed, thermic Typic Haplodurids

Typical pedon: Agon very gravelly loamy sand, in map unit 2421. The soil surface is partially covered with approximately 55 percent pebbles and 2 percent cobbles.

A--0 to 3 inches; light brownish gray (10YR 6/2) very gravelly loamy sand, dark brown (10YR 4/3) moist; weak very thin platy structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine tubular pores; 35

percent pebbles; strongly effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

C1--3 to 27 inches; very pale brown (10YR 7/3) gravelly loamy sand, dark yellowish brown (10YR 4/4) moist; massive; soft, very friable, nonsticky and nonplastic; common fine and medium roots; few very fine tubular and interstitial pores; 20 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

C2--27 to 32 inches; light brown (7.5YR 6/4) gravelly loamy sand, dark brown (7.5YR 4/4) moist; moderate fine and medium subangular blocky structure; slightly hard, friable nonsticky and nonplastic; many very fine and fine roots; few fine tubular pores; 20 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

2Bqkm--32 to 33 inches; very pale brown (10YR 7/3) indurated silica-and lime-cemented laminar duripan; pale brown (10YR 6/3) moist; extremely hard, brittle; violently effervescent.

3R--33 inches; hard rhyolitic tuff bedrock.

Type location: Nye County, Nevada; approximately 3.5 miles east of Bailey's Hot Spring; about 1,200 feet east and 2,600 feet south of the northwest corner of section 18, T.11 S., R.48 E.; (36 degrees, 58 minutes, 52 seconds north latitude and 116 degrees, 39 minutes, 24 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods of time in the late winter and for 10 to 20 days following summer convection storms from July through October.

Soil temperature: 63 to 67 degrees F.

Depth to duripan: 30 to 39 inches.

Depth to bedrock: 30 to 40 inches.

Control section:

Clay content--3 to 5 percent.

Rock fragments--15 to 35 percent, mainly pebbles.

A horizon:

Value--4 through 6, dry or moist.

C horizons:

Hue--10YR or 7.5YR.

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4, dry or moist.

Texture--Gravelly loamy sand or gravelly sand.

Consistence--Soft or slightly hard dry, very friable or friable moist.

Bqkm horizon:

Rupture resistance--Very strongly cemented to indurated.

Alko series

The Alko series consists of shallow to a duripan, well drained soils that formed in alluvium derived from mixed rocks. Alko soils are on fan remnants and have slopes of 0 to 2 percent. The mean annual precipitation is about 6 inches and the mean annual air temperature is about 65 degrees F.

Taxonomic class: Loamy, mixed, superactive, thermic, shallow Typic Haplodurids

Typical pedon: Alko coarse sandy loam, in map unit 3230. (Colors are for dry soil unless otherwise noted.)

A1--0 to 1 inch; light brownish gray (10YR 6/2) coarse sandy loam, dark grayish brown (10YR 4/2) moist; massive; soft, very friable; slightly sticky and slightly plastic; many very fine and fine interstitial pores; strongly effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

A2--1 to 5 inches; light gray (10YR 7/2) coarse sandy loam, dark grayish brown (10YR 4/2) moist; moderate medium and thick platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine, fine and medium vesicular pores; violently effervescent; strongly alkaline (pH 8.8); abrupt smooth boundary.

Bk--5 to 11 inches; very pale brown (10YR 7/3) coarse sandy loam, brown (10YR 4/3) moist, brown (10YR 5/3) when moist and rubbed; weak medium and fine granular structure; soft, very friable, nonsticky and nonplastic; many very fine and fine roots; many very fine and fine interstitial pores; violently effervescent; strongly alkaline (pH 8.8); abrupt wavy boundary.

Bqkm1--11 to 19 inches; white (10YR 8/1) indurated silica-lime cemented hardpan, light gray (10YR 7/2) moist; weak and moderate thin platy structure; extremely hard and extremely firm; few very fine, fine and medium roots between plates; many laminae strata that have smooth upper surfaces; this material is dense and the laminae are so strongly cemented together that they cannot be separated; violently effervescent; abrupt wavy boundary.

Bqkm2--19 to 33 inches; white (10YR 8/1) indurated silica-lime cemented hardpan, very pale brown (10YR 7/3) moist; massive; extremely hard and extremely firm; few very fine and fine roots between plates; few

very fine interstitial pores; violently effervescent; abrupt smooth boundary.

2Bk--33 to 40 inches; light gray (10YR 7/2) coarse sand, dark grayish brown (10YR 4/2) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine and fine roots; many very fine and fine interstitial pores; violently effervescent; many fine white segregated and disseminated lime which cements the material slightly when dry; very strongly alkaline (pH 9.2); abrupt wavy boundary.

3C--40 to 60 inches; light brownish gray (10YR 6/2) coarse sand, dark grayish brown (10YR 4/2) moist; single grain; loose, nonsticky and nonplastic; very few very fine roots; many very fine and fine interstitial pores; strongly effervescent; strongly alkaline (pH 8.9).

Type location: Nye County, Nevada; about 150 feet east and 1,200 feet north of the southwest corner of section 17, T.18 S., R.50 E.; (36 degrees, 22 minutes, 59 seconds north latitude 116 degrees, 22 minutes, 22 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part of the moisture control section for 10 to 20 days cumulative during the period July through October.

Soil temperature: 59 to 66 degrees F.

Depth to duripan: 5 to 20 inches.

Effervescence: Strongly effervescent or violently effervescent.

Reaction: Moderately alkaline or strongly alkaline above the duripan, strongly alkaline or very strongly alkaline below the duripan.

Other features: Some pedons are slightly influenced by gypsum.

Control section:

Clay content--8 to 18 percent.

Rock fragments--0 to 35 percent.

A horizons:

Hue--10YR or 7.5YR.

Value--6 through 8 dry, 4 through 7 moist, commonly 1 unit of value darker than underlying Bk or Bw horizon.

Chroma--2 through 4.

Bk horizon:

Hue--10YR or 7.5YR.

Value--6 through 8 dry, 4 through 7 moist.

Chroma--2 through 4.

Texture--Dominantly sandy loam or coarse sandy loam, some pedons contain thin strata of loam or other textures.

Structure--Massive or granular.

Secondary lime accumulation--Some pedons have common thin lime coats on undersides of rock fragments

Bqkm horizons:

Rupture resistance--Very strongly cemented to indurated.

2Bk and 3C horizons:

Hue--10YR or 7.5YR.

Value--6 through 8 dry, 4 through 7 moist.

Chroma--2 through 4.

Structure--Massive, subangular blocky, or single grain.

Secondary lime accumulation--Some pedons have common thin lime coats on undersides of rock fragments.

Effervescence--Strongly effervescent or violently effervescent, less than 2 percent exchangeable sodium in the lower part of the Bk horizon.

Ardivey series

The Ardivay series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Ardivay soils are on fan remnants. Slopes are 2 to 15 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Durinodic Haplargids

Typical pedon: Ardivay very gravelly sandy loam, in map unit 2671. (Colors are for dry soil unless otherwise noted.)

A1--0 to 3 inches; very pale brown (10YR 7/3) very gravelly sandy loam, brown (10YR 4/3) moist; weak thick platy structure; soft, very friable, slightly sticky and nonplastic; many very fine and fine vesicular pores; 35 percent pebbles; moderately alkaline (pH 8.4); abrupt smooth boundary.

A2--3 to 4 inches; pale brown (10YR 6/3) very gravelly loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; few fine roots; many very fine to medium vesicular pores; 35 percent pebbles; moderately alkaline (pH 8.3); clear smooth boundary.

Bt--4 to 10 inches; light yellowish brown (10YR 6/4) very gravelly loam, yellowish brown (10YR 5/4) moist; weak medium prismatic structure parting to moderate medium subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common fine tubular pores; 45 percent pebbles and 5 percent cobbles; common moderately thick clay films on faces of peds and lining pores; moderately alkaline (pH 8.3); clear smooth boundary.

Btqk--10 to 14 inches; yellowish brown (10YR 5/4) very gravelly loam, dark yellowish brown (10YR 4/4) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; many very fine and fine roots; common fine tubular pores; 50 percent pebbles and 5 percent cobbles; few thin clay films on faces of peds and lining pores; common lime and silica coating on undersides of pebbles; strongly effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

2Bqk1--14 to 17 inches; pale brown (10YR 6/3) extremely gravelly loamy sand, dark brown (10YR 4/3) moist; massive; slightly hard, very friable nonsticky and nonplastic; many very fine and fine roots; common fine tubular pores; 45 percent pebbles, 10 percent cobbles, and 2 percent stones; common thin lime and silica coating on undersides of rock fragments; strongly effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

2Bqk2--17 to 60 inches; very pale brown (10YR 7/3) very gravelly loamy sand, dark brown (10YR 4/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; many very fine and fine roots; common fine interstitial pores; 50 percent pebbles, 5 percent cobbles, and 5 percent stones; discontinuous weakly cemented layers with 35 percent durinodes; strongly effervescent; strongly alkaline (pH 9.0).

Type location: Nye County, Nevada; approximately 5 miles north of the Stonewall Mountains, about 400 feet north and 1,500 feet west of the southeast corner of section 12, T.4 S., R.43 E.; (37 degrees, 36 minutes, 09 seconds north latitude and 117 degrees, 16 minutes, 04 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July to October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Control section:

Clay content--18 to 35 percent.

Rock fragments--45 to 60 percent.

A horizons:

Hue--10YR or 2.5Y.

Value--6 or 7 dry, 3 or 4 moist.

Chroma--2 or 3.

Reaction--Moderately alkaline to strongly alkaline.

Effervescence--Noneffervescent or slightly effervescent.

Bt horizon:

Value--5 or 6 dry, 3 through 5 moist.

Chroma--2 through 4.

Reaction--Neutral to moderately alkaline.

Structure--Weak or moderate prismatic or subangular blocky.

Texture--Very gravelly sandy clay loam, very gravelly clay loam and very gravelly loam.

Consistence--Soft to hard dry, very friable to firm moist.

Btqk and Btk horizon:

Value--5 or 6 dry, 3 or 4 moist.

Chroma--2 through 4.

Structure--Massive or subangular blocky.

Texture--Very gravelly coarse sandy loam, very gravelly loam or extremely gravelly loam.

Bqk horizons:

Value--6 through 8 dry; 4 through 6 moist.

Chroma--2 or 3.

Consistence--Slightly hard to very hard dry, very friable to very firm moist.

Rock fragments--50 to 70 percent pebbles, 5 to 30 percent cobbles and 0 to 10 percent stones.

Silica cementation--Many lime coating and pendants on underside of rock fragments and contains weakly cemented lenticular layers.

Reaction--Moderately alkaline to very strongly alkaline.

Other features--20 to 60 percent weakly to strongly discontinuous silica and lime cementation in subhorizons.

Arizo series

The Arizo series consists of very deep, excessively drained soils that formed in alluvium derived from mixed rocks. Arizo soils are on inset fans. Slopes are 0 to 15 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Sandy-skeletal, mixed, thermic Typic Torriorthents

Typical pedon: Arizo very gravelly sandy loam, in map unit 2152. (Colors are for dry soil unless otherwise noted.)

A--0 to 8 inches; light brownish gray (10YR 6/2) very gravelly sandy loam, dark grayish brown (10YR 4/2) moist; weak thick platy structure; slightly hard, very friable, nonsticky and nonplastic; few fine and medium roots; few fine vesicular and many very fine and fine interstitial pores; 35 percent pebbles; strongly effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

C1--8 to 33 inches; light brownish gray (10YR 6/2) extremely gravelly sand, dark grayish brown (10YR 4/2) moist; single grain; loose, nonsticky and nonplastic; few fine and medium roots; many very fine and fine interstitial pores; 60 percent pebbles and 10 percent cobbles; very thin lime coats on undersides of pebbles; strongly effervescent; moderately alkaline (pH 8.2); gradual wavy boundary.

C2--33 to 60 inches; light brownish gray (10YR 6/2) extremely gravelly sand, dark grayish brown (10YR 4/2) moist; single grain; loose, nonsticky and nonplastic; few very fine and fine roots; many very fine, fine and few medium interstitial pores; 60 percent pebbles, 20 percent cobbles, and 3 percent stones; strongly effervescent; moderately alkaline (pH 8.2).

Type location: Nye County, Nevada; about 100 feet south and 2,000 feet east of the northwest corner of section 36, T.15 S., R.49 E.; (36 degrees, 36 minutes, 44 seconds north latitude and 116 degrees, 24 minutes, 46 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods throughout the moisture control section, December through March. Moist above and periodically in upper part of moisture control section for 10 to 20 days cumulative July through October.

Soil temperature: 59 to 72 degrees F.

Control section:

Rock fragments--35 through 85 percent, mainly pebbles.

Reaction--Slightly alkaline through strongly alkaline.

Other features--Effervescent in some or all parts, with thin lime coatings on undersides of rock fragments in some pedons.

A horizon:

Hue--10YR or 7.5YR.

Value--5 through 8 dry, 4 through 6 moist.

Chroma--2 through 6.

C horizon:

Hue--10YR or 7.5YR.

Value--5 through 8 dry, 3 through 6 moist.

Chroma--2 through 6.

Texture of fine earth--Averages gravelly sand to loamy sand.

Structure--Single grain or massive.

Armpup series

The Armpup series consists of deep, well drained soils that formed in alluvium derived from mixed rocks. Armpup soils are on ballenas. Slopes are 2 to 8 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Fine, smectitic, thermic Typic Natrargids

Typical pedon: Armpup gravelly sandy clay loam, in map unit 2381. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 60 percent pebbles and 10 percent cobbles.

A--0 to 3 inches; very pale brown (10YR 7/4) gravelly sandy clay loam, pale brown (10YR 6/3) moist; strong thin and medium platy structure; hard, firm, sticky and plastic; many very fine and fine vesicular pores, common fine tubular pores; 35 percent pebbles and 5 percent cobbles; violently effervescent; very strongly alkaline (pH 9.6); clear smooth boundary.

Bt_nz--3 to 6 inches; yellowish brown (10YR 5/4) gravelly clay, dark yellowish brown (10YR 4/4) moist; weak fine prismatic structure; hard, firm, very sticky and very plastic; few very fine tubular pores; few fine faint clay films lining pores; 15 percent pebbles; violently effervescent; very strongly alkaline (pH 9.6); clear smooth boundary.

Bt_n--6 to 18 inches; yellowish brown (10YR 5/4) gravelly clay, dark yellowish brown (10YR 4/4) moist; weak coarse prismatic structure; hard, firm, very sticky and very plastic; few very fine tubular pores; common distinct clay films lining pores; 15 percent pebbles; strongly effervescent; very strongly alkaline (pH 9.6); abrupt smooth boundary.

Bt_{kn}--18 to 46 inches; brown (10YR 5/3) extremely gravelly sandy clay, dark brown (10YR 4/3) moist; weak coarse prismatic structure; hard, firm, very sticky and very plastic; common very fine and fine interstitial pores; many prominent clay bridges

between sand grains; common thick lime pendants on undersides of rock fragments; common coarse soft lime masses; 65 percent pebbles and 3 percent cobbles; violently effervescent; very strongly alkaline (pH 9.4); abrupt wavy boundary.

Bk--46 to 55 inches; brown (10YR 5/3) very gravelly loamy sand, dark brown (10YR 4/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; common very fine and fine interstitial pores; 40 percent pebbles and 2 percent cobbles; few thin lime pendants on undersides of rock fragments, few very fine soft lime masses; strongly effervescent; very strongly alkaline (pH 9.4).

Cr--55 inches; olive (5Y 5/3) weathered sedimentary bedrock.

Type location: Nye County, Nevada; approximately 1.2 miles southwest of Ash Meadows Rancho, about 1,000 feet south and 1,500 feet west of the northeast corner of section 35, T.18 S., R.50 E.; (36 degrees, 20 minutes, 50 seconds north latitude and 116 degrees, 18 minutes, 22 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. The upper part of the moisture control section is moist for a very short time in late winter and for 10 to 20 days following summer convection storms from July through October.

Soil temperature: 67 to 72 degrees F.

Depth to paralithic contact: 40 to 60 inches.

Depth to argillic horizon: 3 to 6 inches.

Control section:

Clay content--35 to 45 percent.

Rock fragments--20 to 35 mainly pebbles.

A horizon:

Value--5 through 7 dry, 4 through 6 moist.

Chroma--3 or 4.

Electrical conductivity--More than 16 mmhos/cm.

Other features--In some pedons a fluffy dry consistence is noted.

Btnz horizon:

Value--4 or 5 dry, 4 or 5 moist.

Chroma--3 or 4.

Texture--Gravelly clay loam, gravelly clay.

Clay content--35 to 45 percent.

Rock fragments--15 to 30 percent, mainly pebbles.

Electrical conductivity--More than 16 mmhos/cm.

SAR--13 to 50.

Btn horizon:

Value--4 or 5 dry, 4 or 5 moist.

Chroma--3 or 4.

Texture--Gravelly clay loam, gravelly clay.

Clay content--35 to 45 percent.

Rock fragments--15 to 30 percent, mainly pebbles.

Electrical conductivity--8 to 27 millimhos centimeters.

Btkn horizon:

Value--4 or 5 moist.

Chroma--3 through 5.

Texture--Very gravelly sandy clay or extremely gravelly sandy clay.

Clay content--35 to 45 percent.

Rock fragments--50 to 70 percent, mainly pebbles.

Carbonates--Common to many coarse soft lime masses; common thick lime pendants on undersides of rock fragments.

Electrical conductivity--20 to 37 millimhos per centimeter.

SAR--13 to 50.

Bk horizon:

Value--4 or 5 moist.

Chroma--3 or 4.

Texture--Very gravelly loamy sand to very gravelly sandy loam.

Clay content--5 to 10 percent.

Rock fragments--35 to 60 percent, mainly pebbles.

Electrical conductivity--8 to 16 millimhos centimeters.

Ashmed series

The Ashmed series consists of very deep, well drained soils on fan remnants. Ashmed soils formed in alluvium derived from mixed rocks. Slopes are 2 to 15 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic Typic Haplargids

Typical pedon: Ashmed gravelly fine sandy loam, in map unit 2381. The soil surface is partially covered with approximately 60 percent pebbles and 10 percent cobbles.

A1--0 to 4 inches; very pale brown (10YR 7/3) gravelly fine sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; many fine and medium vesicular pores, 20 percent pebbles; violently effervescent; very strongly alkaline (pH 9.6); clear smooth boundary.

A2--4 to 7 inches; pale brown (10YR 6/3) gravelly silt loam, dark brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine vesicular pores, 15 percent pebbles; violently effervescent, very strongly alkaline (pH 9.6); clear wavy boundary.

Btk--7 to 24 inches; brown (10YR 5/3) extremely gravelly sandy clay loam, yellowish brown (10YR 5/4) moist; weak fine subangular blocky structure; hard, very friable, slightly sticky and slightly plastic; common very fine, fine and medium interstitial pores; few thin clay films bridging sand grains and lining pores; 70 percent pebbles, 10 percent cobbles, and 3 percent stones; many coarse soft lime masses, common lime coating on undersides of rock fragments; violently effervescent, strongly alkaline (pH 9.0); clear smooth boundary.

2Bk--24 to 32 inches; brown (10YR 5/3) extremely gravelly coarse sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, nonsticky and slightly plastic; common very fine and fine interstitial pores; 65 percent pebbles, 5 percent cobbles, and 2 percent stones; patchy lime coating undersides of rock fragments; violently effervescent; strongly alkaline (pH 9.0); abrupt wavy boundary.

3C--32 to 60 inches; brown (10YR 5/3) very gravelly coarse sandy loam, yellowish brown (10YR 5/4) moist; massive; hard, firm, nonsticky and nonplastic; common very fine interstitial pores; 50 percent pebbles and 3 percent cobbles; strongly effervescent; strongly alkaline (pH 9.0).

Type location: Nye County, Nevada; approximately 1.7 miles southeast of Ash Meadows Rancho, about 2,500 feet north and 500 feet west of the southeast corner of section 36, T.18 S., R.50 E.; (36 degrees, 20 minutes, 31 seconds north latitude and 116 degrees, 17 minutes, 05 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. The upper part of the moisture control section is moist for a very short time in late winter and early spring for 10 to 20 days intermittently following summer convection

Soil temperature: 63 to 72 degrees F.

Control section:

Clay content--20 to 35 percent.

Rock fragments--60 to 85 percent.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4 dry or moist.

Btk horizon:

Value--5 or 6 dry, 4 or 5 moist.

Chroma--3 or 4 dry or moist.

Texture--Extremely gravelly sandy clay loam or extremely gravelly clay loam.

Structure--Weak subangular blocky or massive.

SAR--13 to 35.

Secondary lime--Many soft lime masses present in most pedons.

Bk horizon:

Value--5 or 6 dry, 4 or 5 moist.

Chroma--3 or 4 dry or moist.

Texture--Extremely gravelly sandy loam or extremely gravelly coarse sandy loam.

Clay content--5 to 15 percent.

Rock fragments--60 to 80 percent, mainly pebbles.

Other features--Few patches of gypsum crystals present in some pedons.

C horizon:

Value--5 or 6 dry, 4 or 5 moist.

Chroma--3 or 4 dry or moist.

Texture--Very gravelly sandy loam, extremely gravelly sandy loam, or very gravelly coarse sandy loam.

Clay content--5 to 15 percent.

Rock fragments--50 to 70 percent, mainly pebbles.

Bacho series

The Bacho series consists of very shallow and shallow over an indurated duripan, well drained soils that formed in alluvium derived from mixed rocks. Bacho soils are on partial ballenas. Slopes are 2 to 15 percent. Mean annual precipitation is about 9 inches and mean annual temperature is about 60 degrees F.

Taxonomic class: Clayey-skeletal, smectitic, thermic, shallow Typic Argidurids

Typical pedon: Bacho very gravelly sandy loam, in map unit 2481. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with 40 percent pebbles, 20 percent cobbles, and 5 percent stones.

A--0 to 3 inches; brown (10YR 5/3) very gravelly sandy loam, dark brown (10YR 4/3) moist; moderate thin and medium platy structure; soft, very friable, nonsticky and slightly plastic; few very fine roots; common fine and medium vesicular pores; 50 percent pebbles and 5 percent cobbles, strongly

effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Btk--3 to 11 inches; yellowish brown (10YR 5/4) very gravelly clay, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; many fine and medium, common coarse and very coarse roots; common very fine and fine tubular pores; common thin clay films on rock fragments; 50 percent pebbles, 3 percent cobbles, and 2 percent stones; common lime pendants on undersides of rock fragments; strongly effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

Bqkm1--11 to 35 inches; very pale brown (10YR 7/3) strongly cemented duripan; pale brown (10YR 6/3) moist; massive; very hard, very firm and brittle; discontinuous indurated laminar cap (2 to 4 millimeters thick) on some plate like masses; common very fine and fine roots in 1 to 2 millimeter wide random fractures; common very fine and fine interstitial pores; violently effervescent; gradual smooth boundary.

Bqkm2--35 to 39 inches; very pale brown (10YR 7/3) indurated duripan, pale brown (10YR 6/3) moist; massive; extremely hard, extremely firm and brittle; common silica laminae in fractures, violently effervescent.

Type location: Nye County, Nevada; approximately 3.5 miles north of Oasis Mountain, about 260 feet north and 4,500 feet west of the projected southeast corner of section 5, T.10 S., R.47 E.; (37 degrees, 05 minutes, 25 seconds and 116 degrees, 44 minutes, 55 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry but moist in some part of the moisture control section during the winter and early spring and for short intermittent periods 10 to 20 days following summer convection storms from July through October.

Soil temperature: (Average annual)--63 to 67 degrees F.

Depth to duripan: 8 to 14 inches.

Control section:

Clay content--35 to 50 percent.

Rock fragments--35 to 60 percent, mainly pebbles.

A horizon:

Value--4 through 6 dry or moist.

Btk horizon:

Value--4 or 5 dry or moist.

Chroma--3 or 4.

Texture--Very gravelly clay or very gravelly sandy clay.

Clay content--40 to 50 percent.

Rock fragments--35 to 60 percent pebbles.

Structure--Subangular blocky or the horizon is massive.

Other features--Thin patchy clay coats on pedis in some pedons.

Bqkm horizons:

Value--5 through 7 dry or moist.

Chroma--3 or 4.

Structure--Massive or platy.

Consistence--Very hard or extremely hard dry, very firm or extremely firm moist.

Other features--Some pedons may have plate like indurated layers in a continuous strongly cemented matrix.

Rupture resistance--Strongly cemented or indurated.

Besherm series

The Besherm series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Besherm soils are on lake plains. Slopes are 0 to 4 percent. The mean annual precipitation is about 4 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Fine, carbonatic, thermic Typic Haplocalcids

Typical pedon: Besherm clay loam, in map unit 3313. (Colors are for dry soil unless otherwise noted.)

A--0 to 2 inches; light brownish gray (10YR 6/2) clay loam, pale brown (10YR 6/3) moist; strong thick platy structure; hard, firm, sticky and plastic; many fine vesicular pores; violently effervescent; strongly alkaline (pH 9.0); abrupt smooth boundary.

Bwy1--2 to 7 inches; pale brown (10YR 6/3) clay, pale brown (10YR 6/3) moist; strong medium prismatic structure, hard, very firm, very sticky and very plastic; common fine tubular pores; common white flecks of gypsum and lime; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

Bwy2--7 to 11 inches; pale brown (10YR 6/3) clay, pale brown (10YR 6/3) moist; strong medium prismatic structure; hard, very firm, very sticky and very plastic; common very fine and fine roots; common fine tubular pores; few white flecks of lime and gypsum; violently effervescent; strongly alkaline (pH 8.8); abrupt smooth boundary.

Bk1--11 to 21 inches; white (10YR 8/1) clay, light gray (10YR 7/2) moist; weak coarse prismatic structure; hard, very firm, very sticky and very plastic; few very fine and fine roots; few fine tubular pores; many coarse lime masses; violently effervescent; strongly alkaline (pH 8.8); abrupt irregular boundary.

Bk2--21 to 36 inches; white (5Y 8/2) clay, gray (5Y 6/1) moist; moderate coarse prismatic structure parting to weak medium subangular blocky; hard, firm, very sticky and very plastic; few fine and very fine roots; few fine tubular pores; many coarse lime masses; violently effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

Bk3--36 to 60 inches; white (5Y 8/1) clay, gray (5Y 6/1) moist; strong medium and coarse prismatic structure parting to strong medium subangular blocky; very hard, firm, very sticky and very plastic; many soft lime masses; violently effervescent; moderately alkaline (pH 8.4).

Type location: Nye County, Nevada; approximately 4,800 feet south and 1,000 feet east of the junction of Meir street and State Route 372, about 1,850 feet west and 2,800 feet south of the northeast corner of section 36, T.20 S., R.52 E.; (36 degrees, 10 minutes, 05 seconds north latitude and 116 degrees, 04 minutes, 24 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. The upper part of the moisture control section is moist for a very short time in late winter and for 10 to 20 days following summer convection storms from July through mid October.

Soil temperature: 59 to 65 degrees F.

Depth to calcic horizon: 10 to 20 inches.

Calcium carbonate equivalent: 40 to 60 percent mainly disseminated lime.

Cracking: Cracks 1 to 2 centimeters wide and 6 to 12 inches apart extend to 11 inches in many pedons.

Control section:

Clay content--35 to 60 percent weighted average.

A horizon:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--2 or 3.

Reaction--Strongly alkaline or very strongly alkaline.

Bwy horizons:

Value--6 or 7 dry, 5 or 6 moist.

Chroma--3 or 4 dry or moist.

Reaction--Strongly alkaline to very strongly alkaline.

Bk horizons:

Hue--10YR, 2.5Y or 5Y.

Value--7 or 8 dry, 6 or 7 moist.

Chroma--1 or 2 dry; 1 through 3 moist.

Texture--Clay loam, silty clay, or clay.

Clay content--35 to 50 percent.

Consistence--Hard or very hard dry, firm or very firm moist.

Calcium carbonate equivalent--40 to 60 percent in upper part and 60 to 80 percent in the Bk2 horizon.

Reaction--Moderately alkaline through very strongly alkaline.

Blacktop series

The Blacktop series consists of very shallow, somewhat excessively drained soils that formed in residuum and colluvium derived from volcanic rocks. Blacktop soils are on hills and mountains. Slopes are 15 to 75 percent. Mean annual precipitation is about 6 inches and mean annual air temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, mesic Lithic Torriorthents

Typical pedon: Blacktop very gravelly sandy loam, in map unit 2740. (Colors are for dry soil unless otherwise noted.)

A1--0 to 2 inches; light gray (10YR 7/2) very gravelly sandy loam, grayish brown (10YR 5/2) moist; moderate thin platy structure; soft, very friable, nonsticky and nonplastic; many fine and very fine interstitial pores; 50 percent pebbles and 5 percent cobbles; slightly effervescent; slightly alkaline (pH 7.6); abrupt smooth boundary.

A2--2 to 7 inches; light gray (10YR 7/2) very gravelly sandy loam, grayish brown (10YR 5/2) moist; moderate medium and fine subangular blocky structure; slightly hard, very friable, nonsticky and slightly plastic; common fine and very fine roots; many fine and very fine interstitial pores; 40 percent pebbles and 5 percent cobbles; strongly effervescent; slightly alkaline (pH 7.8); abrupt irregular boundary.

R--7 inches; highly fractured tuffaceous bedrock.

Type location: Nye County, Nevada; approximately 5 miles southwest of Mud Lake, about 1,500 feet east and 300 feet south of the northwest corner of section 33, T.1 S., R.43 E.; (37 degrees, 48 minutes, 54

seconds and 117 degrees, 09 minutes, 48 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months, and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to bedrock: 4 to 10 inches.

Reaction: Slightly alkaline or moderately alkaline.

Effervescence: Slightly effervescent or strongly effervescent.

Control section:

Texture (less than 2 millimeters)--Averages sandy loam or fine sandy loam.

Rock fragments--35 to 70 percent.

Bluepoint series

The Bluepoint series consists of very deep, somewhat excessively drained soils that formed in eolian materials. Bluepoint soils are on dunes and sand sheets. Slopes are 0 to 30 percent. The mean annual precipitation is about 5 inches and the mean annual temperature is about 66 degrees F.

Taxonomic class: Mixed, thermic Typic Torripsamments

Typical pedon: Bluepoint loamy fine sand, in map unit 2151. (Colors are for dry soil unless otherwise noted.)

Ap--0 to 9 inches; light reddish brown (5YR 6/4) loamy fine sand, reddish brown (5YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; many fine and medium roots; many very fine interstitial pores; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

C1--9 to 17 inches; light reddish brown (5YR 6/4) finely stratified loamy fine sand and loamy sand, reddish brown (5YR 5/4) moist; weak thick platy structure; soft, very friable, nonsticky and nonplastic; many fine and medium roots; few very fine and fine tubular, and many very fine interstitial pores; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

C2--17 to 30 inches; pink (5YR 7/4) fine sand, reddish brown (5YR 5/4) moist; single grain; loose, nonsticky and nonplastic; many fine and common medium roots; many very fine interstitial pores; slightly

effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary.

C3--30 to 41 inches; pink (5YR 7/4) loamy fine sand, reddish brown (5YR 5/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; common fine and medium roots; many very fine interstitial pores; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

C4--41 to 60 inches; pink (5YR 7/4) loamy fine sand, reddish brown (5YR 5/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; many fine roots; many very fine interstitial pores; violently effervescent; strongly alkaline (pH 8.6).

Type location: Nye County, Nevada; about 1,800 feet south and 200 feet east of the northwest corner of section 4, T.16 S., R.48 E.; (36 degrees, 35 minutes, 35 seconds north latitude and 116 degrees, 34 minutes, 38 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. Moist for short periods throughout the moisture control section December through March. Moist above and periodically in upper part of moisture control section 10 to 20 days cumulative, July through mid October.

Soil temperature: 65 to 70 degrees F.

Control section:

Clay content--2 to 10 percent.

Rock fragments--Average less than 15 percent.

Soil color--Darker values and lower chroma reflect lithochromic colors.

A and C horizons:

Hue--5YR, 7.5YR or 10YR.

Value--4 through 7 dry, 3 through 6 moist.

Chroma--3 through 6.

Texture--Commonly loamy fine sand or loamy sand, includes sand or fine sand, containing more than 10 percent silt plus clay.

Structure--Single grain, massive, or platy.

Reaction--Slightly alkaline through strongly alkaline.

Other features--Calcareous in some part or all of control section. Few gypsum or lime segregations in some pedons.

Bobnbob series

The Bobnbob series consist of very deep, somewhat poorly drained soils that formed in alluvium derived from mixed rocks. Bobnbob soils are on flood plains. Slopes are 0 to 2 percent. Mean annual precipitation is about 6

inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Fine-silty, mixed, superactive, calcareous, thermic Aquic Torrifluvents

Typical pedon: Bobnbob silty clay loam, in map unit 3052. (Colors are for dry soil unless otherwise noted.)

- A1--0 to 3 inches; very pale brown (10YR 8/3) silty clay loam, brown (10YR 5/3) moist; moderate medium platy structure; slightly hard, very friable, sticky and plastic; common fine and medium roots; few fine vesicular and common fine and medium tubular pores; violently effervescent; strongly alkaline (pH 8.8); clear wavy boundary.
- A2--3 to 7 inches; light gray (10YR 7/2) silty clay loam brown (10YR 5/3) moist; weak coarse subangular blocky structure; slightly hard, very friable, sticky and plastic; many fine and common medium roots; common fine tubular pores; few thin clay films in root channels; violently effervescent; strongly alkaline (pH 8.8); clear wavy boundary.
- C1--7 to 13 inches; light gray (10YR 7/2) clay loam, brown (10YR 5/3) moist; massive, slightly hard, very friable, slightly hard, very friable, slightly sticky and plastic; many very fine and fine roots; common fine and medium tubular pores; violently effervescent; very strongly alkaline (pH 9.2); clear wavy boundary.
- C2--13 to 23 inches; pale brown (10YR 6/3) silty clay loam brown (10YR 5/3) moist; massive, hard, friable, sticky and plastic; many fine and common very fine roots; common very fine and fine tubular pores; violently effervescent; very strongly alkaline (pH 9.2); gradual wavy boundary.
- C3--23 to 29 inches; very pale brown (10YR 7/3) clay, pale brown (10YR 6/3) moist, massive; hard, friable, sticky and plastic; common fine and few medium roots; common fine tubular pores; common medium faint light yellowish brown (10YR 6/4) mottles; violently effervescent; very strongly alkaline (pH 9.2); clear wavy boundary.
- 2Ab--29 to 38 inches; light brownish gray (10YR 6/2) silty clay loam, brown (10YR 4/3) moist; few fine prominent reddish brown (5YR 5/4) mottles; massive; slightly hard, friable, sticky and plastic; few fine roots; common fine and medium tubular pores; strongly effervescent; strongly alkaline (pH 8.8); gradual wavy boundary.
- 2C'--38 to 52 inches; white (10YR 8/2) clay loam, pale brown (10YR 6/3) moist; massive; slightly hard, very friable, sticky and plastic; common fine and few medium roots; common fine and medium tubular pores; common coarse light brownish gray (10YR

6/2) mottles; few distinct reddish yellow (7.5YR 6/6); strongly effervescent; strongly alkaline (pH 8.8); clear wavy boundary.

3Ckq--52 to 60 inches; very pale brown (10YR 7/3) sandy loam, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few fine interstitial pores; few coarse yellowish brown (10YR 5/6) mottles; common medium and fine white (10YR 8/2) lime masses; weakly lime cemented; 5 percent durinodes; slightly effervescent; lime masses are violently effervescent; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada; about 700 feet west and 400 feet north of the southeast corner of section 10, T.18 S., R.50 E.; (36 degrees, 23 minutes, 45 seconds north latitude and 116 degrees, 19 minutes, 17 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually moist in winter and spring, dry in summer and fall. (Saturated at depths of 3 to 5 feet in late winter and spring, unless drained.)

Soil temperature: 59 to 65 degrees F.

Reaction: Strongly alkaline or very strongly alkaline.

Control section:

Clay content--27 to 35 percent.

A horizons:

Value--6 through 8 dry, 5 or 6 moist.

Chroma--2 or 3.

C horizons:

Hue--10YR or 2.5Y.

Value--6 through 8 dry, 5 or 6 moist.

Chroma--2 or 3.

Texture--Stratified fine sandy loam to clay averages silty clay loam.

Calcium carbonate equivalent--20 to 40 percent

2Ab horizon:

Value--5 or 6 dry, 3 through 5 moist.

Chroma--2 or 3.

Texture--Silt loam, loam or silty clay loam.

2C' horizon:

Hue--10YR, 2.5Y or 5Y.

Value--7 or 8 dry, 6 or 7 moist.

Texture--Clay loam or silty clay loam.

Calcium carbonate equivalent--25 to 40 percent

3Ckq horizon:

Hue--10YR, 2.5Y or 5Y.

Value--7 or 8 dry, 4 through 7 moist.

Calcium carbonate equivalent--40 to 60 percent

Boxspring series

The Boxspring series consists of shallow to bedrock, well drained soils that formed in colluvium derived from limestone. Boxspring soils are on mountains. Slopes are 30 to 75 percent. The mean annual precipitation is about 10 inches and the mean annual temperature is about 55 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, mesic Lithic Ustic Torriorthents

Typical pedon: Boxspring extremely gravelly loam, in map unit 320 in the adjacent Clark County Area, Nevada, soil survey. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 60 percent pebbles, 15 percent cobbles, and 10 percent stones.

A--0 to 2 inches; yellowish brown (10YR 5/4) extremely gravelly loam, brown (10YR 4/3) moist weak thin platy structure; soft, very friable, slightly sticky and slightly plastic, few very fine roots, many very fine and fine interstitial pores and common very fine vesicular pores; 60 percent pebbles, 15 percent cobbles, and 10 percent stones, violently effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

C1--2 to 5 inches; pale brown (10YR 6/3) very gravelly loam, dark yellowish brown (10YR 4/4) moist; weak very fine and fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine and few medium roots; many very fine and fine interstitial pores, common very fine and fine tubular pores; 40 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

C2--5 to 15 inches; light yellowish brown (10YR 6/4) extremely gravelly loam, dark yellowish brown (10YR 4/4) moist; weak very fine and fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine and medium roots; common very fine and fine interstitial pores and common fine tubular pores; 65 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

R--15 inches; limestone bedrock, discontinuous calcium carbonate coating bedrock.

Type location: Clark County, Nevada; south of Billy Goat Peak on Whitney Ridge; about 2,200 feet south and 450 feet west of the northeast corner of section 33, T.16 S., R.71 E.; (36 degrees, 30 minutes, 01

second north latitude and 114 degrees, 03 minutes, 33 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods in winter and early spring and intermittently moist during the period June through October due to summer convection storms.

Soil temperature: 55 to 58 degrees F.

Depth to bedrock: 14 to 20 inches.

Carbonates: Averages 40 to 60 percent, calcium carbonate equivalent in the less than 20 millimeter fraction.

Control section:

Clay content--10 to 18 percent.

Rock fragments--35 to 70 percent, dominantly pebbles and cobbles.

A horizon:

Value--5 through 7 dry, 3 through 5 moist.

C horizons:

Value--5 through 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Clay content--10 to 18 percent.

Texture--Very gravelly loam or very cobbly loam, or extremely gravelly loam or extremely cobbly loam.

Structure--Weak fine or very fine subangular blocky or massive.

Consistence--Soft or slightly hard.

Reaction--Moderately alkaline or strongly alkaline

Breko series

The Breko series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Breko soils are on fan remnants. Slopes are 2 to 8 percent. Mean annual precipitation is about 9 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Xeric Haplargids

Typical pedon: Breko gravelly sandy loam, in map unit 2090. The soil surface is partially covered with approximately 50 percent pebbles and 10 percent cobbles.

A1--0 to 3 inches; pale brown (10YR 6/3) gravelly sandy loam, brown (10YR 5/3) moist; weak very thin and thin platy structure; slightly hard, friable, slightly sticky

and nonplastic; common very fine and fine, and few medium roots; common very fine and fine tubular and interstitial pores; 30 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); gradual wavy boundary.

A2--3 to 6 inches; light yellowish brown (10YR 6/4) loam, yellowish brown (10YR 5/4) moist; moderate very thin and thin platy structure; slightly hard, friable, slightly sticky and nonplastic; common very fine and fine, and few medium roots; common very fine and fine tubular and interstitial pores; 5 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Bt1--6 to 12 inches; light brown (7.5YR 6/4) very gravelly clay loam, brown (7.5YR 5/4) moist; strong medium and coarse subangular blocky structure; hard, firm, sticky and plastic; common very fine and fine, few medium roots; common very fine and fine tubular pores; many thick clay films lining pores and on faces of peds; 35 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); gradual wavy boundary.

Bt2--12 to 21 inches; light brown (7.5YR 6/4) very gravelly sandy clay loam, brown (7.5YR 5/4) moist; strong fine and medium subangular blocky structure; hard, firm, sticky and plastic; few very fine and fine roots; few very fine and fine tubular pores; common thin clay films lining pores and on faces of peds; 55 percent pebbles; strongly effervescent; moderately alkaline (pH 8.2); gradual wavy boundary.

Bt3--21 to 29 inches; light brown (7.5YR 6/4) extremely gravelly sandy clay loam, brown (7.5YR 5/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; few very fine and fine roots; few very fine and fine tubular pores; few thin clay films lining pores and on faces of peds; 70 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4); gradual wavy boundary.

Bk--29 to 42 inches; very pale brown (10YR 7/4) extremely gravelly coarse sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and fine roots; few very fine and fine interstitial and tubular pores; 75 percent pebbles; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

2Bqk--42 to 46 inches; white (10YR 8/1) extremely gravelly loamy coarse sand, very pale brown (10YR 7/3) moist; massive; very hard, very firm and brittle, nonsticky and nonplastic; few very fine tubular pores; weak continuous brittle matrix; 75 percent pebbles; violently effervescent; strongly alkaline (pH 8.6); gradual wavy boundary.

3B'k--46 to 60 inches; very pale brown (10YR 7/3) extremely gravelly coarse sandy loam, pale brown (10YR 6/3) moist; massive; soft, very friable,

nonsticky and nonplastic; many very fine and fine interstitial pores; 75 percent pebbles; violently effervescent; strongly alkaline (pH 8.6).

Type location: Nye County, Nevada; approximately 2 miles southwest of Mud Springs; about 3,650 feet west and 2,500 feet north of the southeast corner of section 19, T.11 S., R.46 E.; (36 degrees, 57 minutes, 55 seconds north latitude and 116 degrees, 52 minutes, 22 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in the winter and spring months, dry in summer and fall except for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 55 to 59 degrees F.

Control section:

Clay content--25 to 35 percent.

Rock fragments--35 to 60 percent.

A horizon:

Value--5 through 7 dry, 4 through 6 moist.

Chroma--2 through 4, dry or moist.

Effervescence--Noneffervescent or slightly effervescent.

Bt horizon:

Hue--7.5YR or 5YR.

Value--5 through 7 dry, 4 through 6 moist.

Chroma--2 through 4, dry or moist.

Texture of fine earth--Clay loam, loam or sandy clay loam.

Clay content--25 to 35 percent.

Rock fragments--Average 35 to 60 percent, mainly pebbles, with some subhorizons up to 70 percent.

Structure--Strong or weak subangular blocky.

Reaction--Moderately alkaline or strongly alkaline.

Effervescence--Slightly effervescent to strongly effervescent.

Bk horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Texture of fine earth--Stratified sandy loam to loamy coarse sand.

Clay content--5 to 8 percent.

Rock fragments--55 to 75 percent.

Structure--Massive or single grain.

Consistence--Soft to hard dry, nonsticky or slightly sticky wet.

Reaction--Moderately alkaline or strongly alkaline.

Effervescence--Strongly effervescent to violently effervescent.

2Bqk horizon:

Value--7 or 8 dry, 6 or 7 moist.

Chroma--1 through 3, dry or moist.

Texture of fine earth--Coarse sandy loam, loamy coarse sand or loamy sand.

Rock fragments--60 to 75 percent, mainly pebbles.

Reaction--Strongly alkaline or very strongly alkaline.

Cementation--Has weak continuous silica cementation and 30 to 50 percent durinodes in friable matrix.

3B'k horizon:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--2 or 3, dry or moist.

Texture of fine earth--Sandy loam or coarse sandy loam.

Rock fragments--65 to 80 percent, mainly pebbles.

Effervescence--Strongly effervescent or violently effervescent.

Brier series

The Brier series consists of shallow, well drained soils that formed in residuum and colluvium derived from volcanic rocks. Brier soils are on mountains. Slopes are 30 to 50 percent. Mean annual precipitation is about 10 inches and mean annual temperature is about 47 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Lithic Argixerolls

Typical pedon: Brier very cobbly loam, in map unit 2736. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 30 percent pebbles, 20 percent cobbles, and 2 percent stones.

A--0 to 4 inches; brown (10YR 5/3) very cobbly loam, very dark grayish brown (10YR 3/2) moist; weak medium platy structure; soft, very friable, slightly sticky and slightly plastic; common very fine roots; common fine and medium vesicular and few very fine tubular pores; 20 percent pebbles, 30 percent cobbles, and 2 percent stones; slightly alkaline (pH 7.4); clear smooth boundary.

Bt--4 to 15 inches; yellowish brown (10YR 5/4) very cobbly clay loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and plastic; common very fine and fine and few medium roots; common very fine and fine tubular pores; common moderately thick clay films on faces of peds and lining pores and on

rock fragments; 20 percent pebbles, 25 percent cobbles, and 2 percent stones; slightly alkaline (pH 7.4); abrupt wavy boundary.

R--15 inches; hard fractured welded rhyolitic tuff.

Type location: Nye County, Nevada; located in the Grapevine Mountains; about 5,000 feet east of the Esmeralda County line, about 250 feet north and 300 feet east of the southwest corner of section 34, T.10 S., R.43 E.; (37 degrees, 01 minutes, 02 seconds north latitude and 117 degrees, 08 minutes, and 51 seconds west longitude.)

Range in Characteristics:

Soil moisture: Moist in the winter and early spring months, and dry in summer and fall except for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 49 to 53 degrees F.

Mollic thickness: 7 to 15 inches.

Depth to bedrock: 14 to 20 inches.

Reaction: Neutral or slightly alkaline.

Control section:

Clay content--Averages 18 to 35 percent.

Rock fragments--35 to 60 percent, mainly cobbles.

A horizon:

Value--4 or 5 dry, 2 or 3 moist.

Chroma--2 or 3 dry or moist.

Bt horizon:

Value--5 or 6 dry, 3 or 4 moist.

Chroma--3 or 4 dry or moist.

Texture of fine earth--Averages loam, clay loam, or sandy clay loam, some subhorizons have greater than 35 percent clay.

Bullfor series

The Bullfor series consists of moderately deep to a silica-cemented hardpan well-drained soils that formed in eolian sand and alluvium derived from mixed rocks. Bullfor soils are on sand sheets. Slopes are 0 to 4 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Sandy, mixed, thermic Typic Haplodurids

Typical pedon: Bullfor gravelly loamy sand, in map unit 2212. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 50 percent pebbles.

A--0 to 1 inch; very pale brown (10YR 7/3) gravelly loamy sand, yellowish brown (10YR 5/4) moist; weak medium platy structure; soft, very friable, nonsticky and nonplastic; common very fine roots; common fine interstitial pores; 25 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2) abrupt wavy boundary.

Bk--1 to 24 inches; very pale brown (10YR 7/3) loamy sand, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; common fine, medium and coarse roots; common fine interstitial pores; 3 percent pebbles; slightly effervescent with strongly effervescent spots; moderately alkaline (pH 8.2) abrupt wavy boundary.

Bqkm--24 to 25 inches; white (10YR 8/2) silica and lime cemented duripan; very pale brown (10YR 8/4) moist; laminar cap indurated in upper 2 to 3 millimeters and strongly cemented below; very hard, violently effervescent; clear wavy boundary.

2Bqk--25 to 60 inches; white (10YR 8/2) very gravelly sandy loam, very pale brown (10YR 8/4) moist; massive; hard, firm, nonsticky and nonplastic; common very fine and fine interstitial pores; 55 percent pebbles; 10 percent strongly silica and lime-cemented masses; strongly effervescent; strongly alkaline (pH 8.6).

Type location: Nye County, Nevada; in Sarcobatus Flat about 20 miles northwest of the town of Beatty, about 2,500 feet south and 3,300 feet west of the projected northeast corner of section 30, T.9 S., R.46 E.; (37 degrees, 07 minutes, 34 seconds north latitude and 116 degrees, 52 minutes, 15 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods of time in the late winter and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 63 to 67 degrees F.

Depth to duripan: 20 to 40 inches.

Other features: In some pedons a weakly to strongly cemented layer underlies the indurated portion of the duripan.

Control section:

Clay content--2 to 5 percent.

Rock fragments--Up to 10 percent pebbles.

A horizon:

Hue--10YR or 7.5YR.

Value--7 or 8 dry, 5 or 6 moist.

Chroma--3 through 5.

Bk horizon:

Hue--10YR or 7.5YR.

Value--7 or 8 dry, 5 or 6 moist.

Chroma--3 through 5.

Structure--Massive or single grain.

Texture--Loamy sand or fine sand.

Bqkm horizon:

Rupture resistance--Strongly cemented to indurated.

2Bqk horizon:

Hue--10YR or 7.5YR.

Value--7 or 8 dry or moist.

Chroma--2 through 4.

Rock fragment--40 to 60 percent.

Canoto series

The Canoto series consists of deep, well drained soils that formed in alluvium derived from mixed rocks. Canoto soils are on erosional fan remnants. Slopes are 2 to 8 percent. Mean annual precipitation is about 6 inches and mean annual temperature is 67 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, thermic Typic Torriorthents

Typical pedon: Canoto very gravelly sandy loam, in map unit 2052, rangeland. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 50 percent pebbles.

A--0 to 2 inches; very pale brown (10YR 7/4) very gravelly sandy loam, light yellowish brown (10YR 6/4) moist; moderate medium and thick platy structure; slightly hard, very friable, nonsticky and nonplastic; few very fine roots; common very fine and fine vesicular and interstitial pores; 40 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

Bk1--2 to 11 inches; very pale brown (10YR 7/4) very gravelly fine sandy loam, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and medium roots; common very fine and fine interstitial pores; 40 percent pebbles; few 1 millimeter thick lime coats on pebbles; few thin lime coats on pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk2--11 to 22 inches; very pale brown (10YR 7/4) very gravelly coarse sandy loam, light yellowish brown (10YR 6/4) moist; massive; soft, very friable,

nonsticky and nonplastic; common very fine, fine and medium roots; common very fine and fine interstitial pores; 40 percent pebbles; few 1 millimeter thick lime coats on pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk3--22 to 60 inches: very pale brown (10YR 7/4) very gravelly coarse sandy loam, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; common very fine and fine interstitial pores; 45 percent pebbles; few 1 millimeter thick lime coats on pebbles; violently effervescent; moderately alkaline (pH 8.4).

Type location: Nye County, Nevada; about 2,100 feet north and 850 feet west of the southeast corner of section 4, T.16 S., R.53 E.; (36 degrees, 35 minutes, 17 seconds north latitude and 116 degrees, 01 minute, 03 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods in late summer and winter.

Soil temperature: 66 to 71 degrees F.

Calcium carbonate: Calcium carbonate equivalent is 1 to 10 percent.

Control section:

Clay content--8 to 18 percent.

Rock fragments--Averages 35 to 60 percent, mainly pebbles. Subhorizons with up to 80 percent pebbles are in some pedons.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Bk horizons:

Value--6 or 7 dry, 4 or 5 moist.

Texture--Stratified, extremely gravelly loamy coarse sand to gravelly loam, average texture when mixed is very gravelly sandy loam or very gravelly coarse sandy loam.

Reaction--Moderately alkaline or strongly alkaline.

Casaga series

The Casaga series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Casaga soils are on alluvial flats and fan remnants. Slopes are 0 to 4 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 65 degrees F.

Taxonomic class: Fine-loamy, mixed, superactive, thermic Typic Natrargids

Typical pedon: Casaga very gravelly loam, in map unit 3022. (Colors are for dry soils unless otherwise noted). The soil surface is partially covered with approximately 85 percent varnished desert pavement of pebbles and cobbles.

A--0 to 1 inch, white (10YR 8/2) very gravelly loam, light yellowish brown (10YR 6/4) moist; moderate medium platy structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; many fine and very fine vesicular pores; 50 percent pebbles; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

Btn--1 to 4 inches, very pale brown (10YR 7/3) clay loam, yellowish brown (10YR 5/4) moist; strong coarse prismatic structure parting to strong medium subangular blocky; hard, friable, slightly sticky and plastic; few very fine roots; many very fine tubular pores; few thin clay films on faces of peds and lining pores; 1 percent pebbles; violently effervescent; strongly alkaline (pH 9.0); abrupt wavy boundary.

Btkny1--4 to 8 inches; brown (7.5YR 5/4) clay loam, dark brown (7.5YR 4/4) moist; strong coarse prismatic structure parting to strong medium and fine subangular blocky; very hard, friable, sticky and plastic; common fine and very fine roots; common very fine tubular pores; few thin clay films on peds faces; few medium soft lime and gypsum nodules; violently effervescent; very strongly alkaline (pH 9.4); clear wavy boundary.

Btkny2--8 to 21 inches; brown (7.5YR 5/4) clay loam, dark brown (7.5YR 4/4) moist; moderate medium prismatic structure parting to strong medium subangular blocky; hard, friable, sticky and plastic; few very fine roots; many very fine and fine tubular pores; few thin clay films on faces of peds; few fine soft gypsum masses and common coarse soft lime nodules; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

2Bk1--21 to 41 inches; light brown (7.5YR 6/4) very gravelly clay loam, brown (7.5YR 5/4) moist; massive; hard, friable, sticky and plastic; common very fine tubular pores; many lime coatings and pendants on pebbles; weakly lime cemented; many coarse soft lime nodules; 55 percent pebbles; violently effervescent; strongly alkaline (pH 8.8); clear wavy boundary.

2Bk2--41 to 47 inches; pink (7.5YR 7/4) very gravelly sandy loam, brown (7.5YR 5/4) moist; massive; soft, very friable, nonsticky and slightly plastic; common very fine tubular pores; common thin lime coatings on

undersides of pebbles; few soft masses of lime; 50 percent pebbles; violently effervescent; strongly alkaline (pH 8.8); abrupt wavy boundary.

2By--47 to 61 inches; pinkish white (7.5YR 8/2) very gravelly sandy loam, light brown (7.5YR 6/4) moist; massive; slightly hard, very friable, nonsticky and slightly plastic; few very fine roots; common very fine interstitial and tubular pores; many coarse and very coarse gypsum crystals; 35 percent pebbles; strongly effervescent; slightly alkaline (pH 7.8).

Type location: Nye County, Nevada; about 2,100 feet north and 1,700 feet west of the southeast corner section 34, T.17 S. R.50 E.; (36 degrees, 25 minutes, 51 seconds north latitude and 116 degrees, 19 minutes, 30 seconds west longitude.)

Range in Characteristics:

Soil moisture: Moist for short periods in winter and spring, moist for short intermittent periods in summer, 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 63 to 69 degrees F.

Depth to very gravelly horizon: 20 to 40 inches.

Control section:

Clay content--28 to 35 percent.

Rock fragments--5 to 20 percent, mainly pebbles.

A horizon:

Hue--7.5YR or 10YR.

Value--6 through 8 dry, 4 through 6 moist.

Chroma--2 through 4.

Reaction--Strongly alkaline or very strongly alkaline.

Btn and Btkny horizons:

Hue--10YR, 5YR or 7.5YR.

Value--5 through 7 dry, 3 through 5 moist.

Chroma--3 through 6.

Texture--Clay loam or gravelly clay loam.

Structure--Weak through strong, fine through coarse prismatic parting to moderate or strong, fine and medium subangular blocky.

Reaction--Moderately alkaline through very strongly alkaline.

Lime--Few to common lime masses and soft nodules.

Gypsum--Some gypsum crystals, masses, or nodules.

2Bk horizons:

Value--6 through 8 dry, 5 through 7 moist.

Reaction--Strongly alkaline or very strongly alkaline.

Rock fragments--40 to 60 percent, mainly pebbles.

Lime--Few to many medium or coarse lime masses, soft nodules or soft powdery lime. Partial lime coats or pendants on rock fragments.

Cementation--In some pedons this horizon is weakly lime cemented.

2By horizon:

Hue--7.5YR, 10YR.

Value--6 through 8 moist.

Chroma--1 or 2 dry, 3 or 4 moist.

Rock fragments--35 to 50 percent pebbles.

Reaction--Slightly alkaline or moderately alkaline.

Cementation--Commonly weakly cemented by gypsum; some pedons have only coatings of gypsum on the pebbles, bridges of gypsum between pebbles, or have gypsum crystals.

Caslo series

The Caslo series consists of very deep, poorly drained soils that formed in alluvium derived from mixed rocks. Caslo soils are on flood plains. Slopes are 0 to 2 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Fine-loamy, carbonatic, thermic Typic Fluvaquents

Typical pedon: Caslo silty clay loam, in map unit 3052.

The soil surface is partially covered with approximately 10 percent pebbles.

A--0 to 1 inch; light brownish gray (10YR 6/2) silty clay loam, light brownish gray (2.5Y 6/2) moist; moderate thin platy structure; slightly hard, very friable, slightly sticky and slightly plastic; many fine vesicular and interstitial pores; 5 percent pebbles; violently effervescent; very strongly alkaline (pH 9.6); abrupt smooth boundary.

Bw--1 to 4 inches; light brownish gray (2.5Y 6/2) clay, light brownish gray (2.5Y 6/2) moist; weak medium subangular blocky structure; hard, firm, sticky and plastic; many fine interstitial pores; few soft medium salt masses and crystals; strongly effervescent; very strongly alkaline (pH 9.6); abrupt wavy boundary.

Bgy--4 to 10 inches; light gray (5Y 7/2) clay, light olive gray (5Y 6/2) moist; with few fine distinct pale brown (10YR 6/3) mottles, moderate coarse prismatic structure; very hard, very firm, sticky and plastic; many very fine interstitial pores; common medium gypsum crystals; strongly effervescent; very strongly alkaline (pH 9.6); clear wavy boundary.

2Cg--10 to 34 inches; pale olive (5Y 6/3) clay loam, light olive gray (5Y 6/2) moist, with few thin (1/4 to 1/2 inch) strata of very dark gray (10YR 3/1) fine sandy loam; few fine distinct pale brown (10YR 6/3) and many fine distinct brown (10YR 4/3) mottles; massive; hard, friable, sticky and plastic, massive; many fine roots; common fine tubular pores; violently effervescent; very strongly alkaline (pH 9.2); clear smooth boundary.

3C1--34 to 45 inches; stratified very pale brown (10YR 7/3) sandy loam, brown (10YR 5/3) moist, and white (10YR 8/1) clay; common fine distinct brown (10YR 4/3) mottles; massive; slightly hard, friable, sticky and plastic; violently effervescent; strongly alkaline (pH 8.8); clear smooth boundary.

4C2--45 to 60 inches; white (10YR 8/1) clay, light gray (10YR 7/1) moist; few fine prominent pale brown (10YR 6/3) mottles; massive; very hard, firm, sticky and plastic; violently effervescent; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada; approximately 2,700 feet south and 800 feet west of northeast corner of section 4, T.18 S., R.50 E.; (36 degrees, 25 minutes, 03 seconds north latitude and 116 degrees, 20 minutes, 23 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually moist; saturated in winter and early spring.

Soil temperature: 59 to 65 degrees F.

Carbonates: 40 to 60 calcium carbonate equivalent.

Effervescence: Strongly effervescent or violently effervescent.

Reaction: Strongly alkaline or very strongly alkaline.

Control section:

Clay content--Averages 27 to 35 percent.

A horizon:

Hue--10YR or 2.5Y.

Value--6 or 7 dry, 5 or 6 moist.

Chroma--2 or 3.

Bw horizon:

Hue--10YR or 2.5Y.

Value--6 or 7 dry, 5 or 6 moist.

Chroma--2 or 3.

Bgy horizon:

Hue--2.5Y or 5Y.

Value--6 through 8 dry, 5 through 7 moist.

Chroma--1 or 2.

Other features--Few to common gypsum crystals near cracks of prisms.

C horizons:

Hue--10YR, 2.5Y or 5Y.

Value--6 through 8 (with strata of 3 or 4) dry.

Chroma--1 through 3.

Texture--Stratified sandy loam to clay (averages clay loam).

Cirac series

The Cirac series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Cirac soils are on alluvial flats. Slopes are 0 to 4 percent. Mean annual precipitation is about 4 inches and mean annual air temperature is about 55 degrees F.

Taxonomic class: Coarse-loamy, mixed, superactive, (calcareous), mesic Typic Torrifluvents

Typical pedon: Cirac gravelly sandy loam, in map unit 4070. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 40 percent gravel.

A1--0 to 1 inch; light gray (10YR 7/2) gravelly sandy loam, brown (10YR 5/3) moist; massive; slightly hard, friable, slightly sticky and nonplastic; many very fine and fine interstitial pores; 25 percent pebbles; slightly effervescent; strongly alkaline (pH 8.6); gradual smooth boundary.

A2--1 to 4 inches; pale brown (10YR 6/3) sandy loam, brown (10YR 4/3) moist; moderate medium and thick platy structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine and fine vesicular pores, many fine interstitial pores; 10 percent pebbles; slightly effervescent; strongly alkaline (pH 9.0); clear smooth boundary.

C1--4 to 10 inches; yellowish brown (10YR 5/4) loam, dark yellowish brown (10YR 4/4) moist; moderate medium prismatic structure parting to moderate medium subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; many very fine, fine, and common medium roots; common very fine interstitial and common fine tubular pores; strongly effervescent; strongly alkaline (pH 9.0); clear smooth boundary.

C2--10 to 12 inches; yellowish brown (10YR 5/4) fine sandy loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine and common fine roots; common very

fine interstitial pores; strongly effervescent; strongly alkaline (pH 8.8); clear smooth boundary.

C3--12 to 60 inches; pale brown (10YR 6/3) stratified fine sand through silt loam, grayish brown (10YR 5/2) moist, with faint relict mottles; massive; loose to hard, loose to friable, nonsticky to slightly sticky and nonplastic to slightly plastic; few very fine and fine roots; many very fine interstitial pores; strongly effervescent; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada, in Sarcobatus Flat, approximately 6.5 miles southeast of Bonnie Claire, about 2,000 feet south and 1,000 feet east of the projected northwest corner of section 15, T.9 S, R.44 E.; (37 degrees, 09 minutes, 23 seconds north latitude and 117 degrees, 02 minutes, 12 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Reaction: Strongly alkaline or very strongly alkaline.

Effervescence: Slightly effervescent to violently effervescent throughout.

Salts: 16 to 30 millimhos.

SAR: 13 to 90.

Organic matter: Irregular decrease with depth.

Control section:

Clay content--Averages 8 to 18 percent.

Rock fragments--Averages 0 to 15 percent, dominantly 2 to 4.6 millimeter pebbles, with any layer in substrata containing up to 35 percent.

A horizons:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

C horizons:

Value--5 through 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Texture (less than 2 millimeters)--Stratified sand to silt loam.

Structure--Prismatic subangular blocky or massive.

Consistence--Loose to hard dry, loose to friable moist, nonsticky to sticky and nonplastic to plastic wet.

Rock fragments--0 to 15 percent average, with any strata containing up to 35 percent.

Cobatus series

The Cobatus series consists of very deep, somewhat poorly drained soils that formed in alluvium derived from mixed rocks over lacustrine sediments. Cobatus soils are on lake plains. Slopes are 0 to 2 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 58 degrees F.

Taxonomic class: Fine-loamy, mixed, superactive, calcareous, thermic Aeric Halaquepts

Typical pedon: Cobatus loam, in map unit 2601. (Colors are for dry soil unless otherwise noted.)

Anz--0 to 2 inches; light gray (10YR 7/2) loam, yellowish brown (10YR 5/4) moist; massive; hard, firm, nonsticky and slightly plastic; violently effervescent; very strongly alkaline (pH 9.2); abrupt smooth boundary.

Cn1--2 to 14 inches; very pale brown (10YR 7/3) loam, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and slightly plastic; common fine and medium roots; common very fine and fine interstitial pores; violently effervescent; very strongly alkaline (pH 9.2); abrupt smooth boundary.

2Cn2--14 to 60 inches; very pale brown (10YR 8/3) clay loam, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, sticky, and plastic; common fine and medium roots; common very fine and fine interstitial pores; violently effervescent; very strongly alkaline (pH 9.2)

Type location: Nye County, Nevada; approximately 20 miles northwest of Beatty; about 3,000 feet south and 3,000 feet east of the projected northwest corner of section 17, T.9 S., R.45 S. E.; (37 degrees, 09 minutes, 14 seconds north latitude and 116 degrees, 57 minutes, 28 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods of time in the late winter, saturated within a depth of 40 inches for short periods during spring. Drained phases are recognized.

Soil temperature: 63 to 67 degrees F.

Control section:

Clay content--Averages 20 to 30 percent.

A horizon:

Value--7 or 8 dry, 5 or 6 moist.

Chroma--2 or 3 dry, 2 through 6 moist.

Other features--In some pedons there is a high accumulation of surface salts which forms a structureless crust.

C horizon:

Value--7 or 8 dry, 5 or 6 moist.

Chroma--2 or 3 dry, 4 or 5 moist.

Texture--Dominantly loam, silt loam or clay loam, with some pedons containing thin strata or lenses of coarser or finer textures.

Consistence--Nonsticky or sticky, slightly plastic or plastic.

SAR--20 to 50 in upper part, decreasing with depth.

Other features--At depths below 40 inches in some pedons, strata of coarser textures occurs.

Commski series

The Commski series consists of very deep, well drained soils that formed in alluvium derived from limestone. Commski soils are on fan remnants. Slopes are 0 to 50 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 67 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, thermic Typic Haplocalcids

Typical pedon: Commski very gravelly fine sandy loam, in map unit 2391. The soil surface is partially covered with approximately 55 percent pebbles, 30 percent cobbles, and 1 percent stones.

A--0 to 5 inches; pale brown (10YR 6/3) very gravelly fine sandy loam, yellowish brown (10YR 5/4) moist; moderate fine and medium subangular blocky structure; soft, very friable, sticky and slightly plastic; common very fine and fine roots; common very fine tubular and few very fine and fine interstitial pores; 40 percent pebbles, 2 percent cobbles, and 3 percent stones; strongly effervescent; strongly alkaline (pH 8.6); gradual smooth boundary.

Bk1--5 to 14 inches; pale brown (10YR 6/3) extremely gravelly sandy loam, yellowish brown (10YR 5/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, nonsticky and slightly plastic; common very fine and fine roots; common very fine, many fine and medium interstitial pores; 65 percent pebbles, 2 percent cobbles, and 2 percent stones; common thick lime pendants on rock

fragments; strongly effervescent; strongly alkaline (pH 8.6); diffuse smooth boundary.

Bk2--14 to 60 inches; light brownish gray (10YR 6/2) extremely gravelly coarse sandy loam, brown (10YR 5/3) moist; massive; hard, firm, nonsticky and nonplastic; few very fine roots; many fine and medium interstitial and few very fine tubular pores; 70 percent pebbles, 5 percent cobbles, and 5 percent stones; discontinuous weak brittle matrix cemented by calcium carbonate; violently effervescent; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada; approximately 1 mile southeast of Ash Meadows Rancho, about 35 feet north and 10 feet west of the southeast corner of section 25, T.18 S., R.50 E.; (36 degrees, 21 minutes, 00 seconds north latitude and 116 degrees, 16 minutes, 59 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, the upper part of the moisture control section is moist for a very short time in late winter and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 63 to 69 degrees F.

Depth to calcic horizon: 5 to 18 inches.

Thickness of calcic horizon: More than 30 inches.

Calcium carbonate equivalent: 40 to 60 percent in the less than 20 millimeter fraction.

Reaction: Moderately alkaline or strongly alkaline.

Control section:

Clay content--5 to 15 percent.

Rock fragments--60 to 80 percent mainly pebbles.

A horizon:

Chroma--3 or 4 dry or moist.

Bk1 horizon:

Clay content--5 to 15 percent.

Structure--Subangular blocky or horizon is massive.

Consistence--Slightly hard or hard dry, friable or firm moist.

Bk2 horizon:

Chroma--2 or 3 dry or moist.

Texture of fine earth--Averages sandy loam or coarse sandy loam.

Clay content--5 to 15 percent.

Other features--Discontinuous weak brittle matrix cemented by calcium carbonate.

Corbilt series

The Corbilt series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Corbilt soils are on alluvial fans, fan skirts, and fan remnants. Slopes are 0 to 8 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Coarse-loamy, mixed, superactive, thermic Duric Haplocalcids

Typical pedon: Corbilt very gravelly sandy loam, in map unit 2611. The soil surface is partially covered with approximately 50 percent pebbles overlain by a patchy 1/2 to 1 inch mantle of windblown sand.

A--0 to 4 inches; very pale brown (10YR 7/3) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; strong thick platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine, common fine, and few medium vesicular pores; 35 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

Bk--4 to 16 inches; very pale brown (10YR 7/3) gravelly fine sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine, few fine and medium roots; common very fine interstitial pores; 15 percent pebbles; few lime coatings on faces of peds and pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bqk--16 to 32 inches; very pale brown (10YR 7/3) gravelly fine sandy loam, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine, few fine and medium roots; common very fine and few fine interstitial pores; 20 percent pebbles; few fine masses weakly cemented by lime and silica, silica-lime pendants on undersides of most rock fragments; few, fine lime filaments; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

2Bkq--32 to 56 inches; very pale brown (10YR 7/3) very gravelly sandy loam, light yellowish brown (10YR 6/4) moist; massive, soft, very friable, nonsticky and nonplastic; common very fine roots; common very fine and few fine interstitial pores; a few scattered pockets (6 to 8 inch diameter) of loamy coarse sand; thin (up to 1 inch thick), discontinuous lenses that are weakly silica and lime cemented; few fine lime filaments; lime-silica pendants on undersides of most rock fragments; some pebbles with lime coats on top and bottom; 30 percent pebbles, 5 percent cobbles,

and 5 percent stones; violently effervescent; strongly alkaline (pH 8.8); clear wavy boundary.
2Bkqm--56 to 60 inches; very pale brown (10YR 8/3) strongly cemented duripan, very pale brown (10YR 7/4) moist, massive; 40 percent pebbles and 5 percent cobbles; violently effervescent.

Type location: Nye County, Nevada; approximately 3 miles east of Coba Mountain; about 2,000 feet north and 2,400 feet west of the projected southeast corner of section 18, T.9 S., R.46 E.; (37 degrees, 09 minutes, 11 seconds north latitude and 116 degrees, 52 minutes, 05 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. The upper part of the moisture control section is moist for a very short time in late winter and for 10 to 20 days cumulative between July and October due to summer convection storms.

Soil temperature: 63 to 69 degrees F.

Depth to duripan: 40 to 80 inches.

Calcium carbonate equivalent: Averages 15 to 20 percent.

Other features: The thin mantle of sand is absent on some pedons.

Control section:

Clay content--5 to 10 percent.

Rock fragments--Average 15 to 35 percent.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4 dry or moist.

Bk horizon:

Structure--Weak medium subangular blocky or horizon is massive.

Effervescence--Strongly effervescent or violently effervescent.

Reaction--Moderately alkaline to very strongly alkaline.

Bqk horizon:

Texture of fine earth--Fine sandy loam and sandy loam.

Consistence of matrix--Soft dry, very friable moist.

Reaction--Strongly alkaline or very strongly alkaline.

Other features--Weakly cemented masses constitute up to 20 percent of horizon. In some pedons the matrix is slightly effervescent and cemented patches are violently effervescent.

2Bkq horizon:

Rock fragments--30 to 50 percent pebbles, 5 to 10 percent cobbles, 0 to 5 percent stones.

Texture--Gravelly sandy loam, gravelly fine sandy loam, very gravelly sandy loam and very gravelly fine sandy loam.

Consistence--Soft dry, very friable moist.

Other features--Silica-lime cemented plates comprise up to 20 percent, some pedons contain 20 percent or more hard nodules and concretions.

2Bkqm horizon:

Rupture resistance--Weakly to strongly cemented.

Cruzspring Series

The Cruzspring series consists of shallow, well drained soils that formed in colluvium and residuum from quartzite. Cruzspring soils are on hills and mountain slopes. Slopes are 8 to 75 percent. Mean annual precipitation is about 7 inches and mean annual temperature is about 55 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, superactive, mesic, shallow Typic Haplargids

Typical pedon: Cruzspring extremely gravelly sandy loam, located in map unit 2434. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with 60 percent pebbles and 5 percent cobbles.

A1--0 to 1 inch; yellowish brown (10YR 5/4) extremely gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; strong thick and medium platy structure; slightly hard, very friable, slightly sticky and nonplastic; few very fine and fine roots; common very fine and fine vesicular pores and common fine interstitial pores; 60 percent pebbles and 5 percent cobbles; violently effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary.

A2--1 to 3 inches; yellowish brown (10YR 5/4) very gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; moderate medium platy structure; slightly hard, friable, nonsticky and nonplastic; common very fine and fine, and few medium roots; common very fine and fine interstitial pores and few fine vesicular pores; 40 percent pebbles and 10 percent cobbles; violently effervescent; moderately alkaline (pH 8.0); abrupt wavy boundary.

Btk1--3 to 7 inches; yellowish brown (10YR 5/4) very gravelly loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky

structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine, and few medium roots; common very fine and fine interstitial pores and few fine tubular pores; common faint clay films lining pores and bridging sand grains; 45 percent pebbles and 5 percent cobbles; very few (2 percent) patchy very thin (< .5mm) calcium carbonate coatings on bottoms of rock fragments; violently effervescent; moderately alkaline (pH 8.0); clear wavy boundary.

Btk2--7 to 11 inches; light yellowish brown (10YR 6/4) very gravelly loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; slightly hard; very friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; common very fine and fine interstitial pores and few fine tubular pores; common distinct clay films bridging sand grains and lining pores; 45 percent pebbles and 5 percent cobbles; few (5 percent) patchy very thin (< .5mm) calcium carbonate coatings on bottoms of rock fragments; strongly effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

Cr--11 to 13 inches; fractured, weathered quartzite; common very fine through medium roots in fractures; retains original rock structure.

R--13 inches; hard, slightly fractured quartzite.

Type location: Nye County, Nevada; approximately 0.4 miles southeast of Santa Cruz Spring, about 2,100 feet west and 600 feet south of the northeast corner of section 4, T.19 S., R.54 E.; (36 degrees, 20 minutes, 12.96 seconds north latitude and 115 degrees, 54 minutes, 49.39 seconds west longitude) (GPS reading); NAD 1927; Horse Springs quadrangle.

Range in characteristics:

Soil moisture: Usually dry, but moist in some part for short periods in the winter and early spring months and for brief periods in summer. Ratio of summer to winter actual evapotranspiration is about 0.8, typical of Mojave Desert transitional to Sonoran. Typic aridic soil moisture regime.

Soil temperature: 53 to 59 degrees F.

Depth to paralithic contact: 10 to 14 inches.

Depth to hard bedrock: 12 to 20 inches.

Reaction: Moderately alkaline.

Control section:

Clay content--12 to 18 percent.

Rock fragments--35 to 65 percent, mainly quartzite, gravel, and cobbles.

A horizon:

Hue--10YR or 7.5YR.
 Value--5 or 6 dry, 3 or 4 moist.
 Chroma--3 or 4.
 Structure--Platy or subangular blocky.
 Effervescence--Slightly effervescent to violently effervescent, due to recharge from calcareous dust.

Bt horizon:

Hue--10YR or 7.5YR.
 Value--5 or 6 dry; 4 or 5 moist.
 Chroma--3 or 4.
 Texture--Loam or sandy loam.
 Clay content--15 to 20 percent.
 Rock fragments--40 to 75 percent, mainly quartzite gravel and with up to 20 percent cobbles.
 Structure--Subangular blocky; thin, lower subhorizons are massive in some pedons.
 Effervescence--Slightly effervescent through violently effervescent.
 Calcium carbonate equivalent--1 to 5 percent.

Dedas series

The Dedas series consists of shallow over a duripan well drained soils underlain by bedrock that formed in residuum derived from tuffaceous rocks and volcanic rocks. Dedas soils are on rock pediment remnants. Slopes are 4 to 50 percent. Mean annual precipitation is about 7 inches and mean annual temperature is about 60 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic, shallow Typic Argidurids

Typical pedon: Dedas very gravelly sandy loam, in map unit 2282. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 40 percent pebbles and 20 percent cobbles.

A--0 to 3 inches; pale brown (10YR 6/3) very gravelly sandy loam, dark brown (10YR 4/3) moist; weak thin platy structure; soft, very friable, nonsticky and slightly plastic; common very fine and fine roots; common very fine and fine tubular pores; 40 percent pebbles and 2 percent cobbles; violently effervescent, moderately alkaline (pH 8.4); clear smooth boundary.

Bt--3 to 8 inches; very pale brown (10YR 7/3) very gravelly sandy loam, yellowish brown (10YR 5/4)

moist; moderate medium and coarse subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few thin clay films on pebbles; many very fine and fine, and common medium roots; many fine and few coarse tubular pores; 45 percent pebbles approximately half which are pan fragments; violently effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

Btk--8 to 15 inches; pale brown (10YR 6/3) very gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; moderate medium and coarse subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common fine and medium tubular pores; few very fine roots; few thin clay films on pebbles; common faint lime patches on pebbles; 40 percent pebbles, half of which are pan fragments; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

Bqkm--15 to 17 inches; very pale brown (10YR 8/3) indurated duripan, very pale brown (10YR 7/3) moist; continuous laminar cap and alternating horizontal bands of partially degraded tuff, with continuous thin silica laminae; violently effervescent; abrupt smooth boundary.

R--17 inches; white (10YR 8/1) unweathered tuff bedrock.

Type location: Nye County, Nevada; about 6 miles northeast of Beatty, 2,110 feet north and 790 feet east of the southwest corner of section 19, T.11 S., R.48 E.; (36 degrees, 57 minutes, 53 seconds north latitude and 116 degrees, 39 minutes, 29 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part of the moisture control section for short periods during late fall through early spring, and for a few brief intermittent periods, 10 to 20 days cumulative, between July through October following summer convection storms.

Soil temperature: 59 to 64 degrees F.

Depth to duripan: 14 to 20 inches.

Depth to bedrock: 16 to 24 inches.

Other features: Some pedons have thin Bk horizons below the argillic horizons.

Control section:

Clay content--10 to 18 percent.

Rock fragments--35 to 60 percent pebbles.

A horizon:

Value--5 or 6 dry, 4 or 5 moist.
 Chroma--3 or 4, moist or dry.

Bt horizon:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--3 or 4.

Texture--Very gravelly loam and very gravelly sandy loam, or very gravelly coarse sandy loam.

Clay content--10 to 18 percent.

Rock fragments--35 to 60 percent pebbles.

Structure--Subangular blocky or massive.

Consistence--Very friable or friable moist.

Bqkm horizon:

Value--6 through 8 dry or moist.

Chroma--2 or 3.

Consistence--Very hard through extremely hard dry, very firm through extremely firm moist.

Other features--1 to 4 millimeters thick continuous laminar cap.

Rupture resistance--Very strongly cemented to indurated.

Destazo series

The Destazo series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Destazo soils are on flood plains. Slopes are 2 to 8 percent. Mean annual precipitation is about 5 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, thermic Petronodic Haplocalcids

Typical pedon: Destazo gravelly clay loam, in map unit 2970. (Colors are for dry soil unless otherwise noted.)

A1--0 to 2 inches; pale brown (10YR 6/3) gravelly clay loam, yellowish brown (10YR 5/4) moist; weak medium platy structure; hard, firm, sticky and plastic; few very fine roots; common very fine interstitial pores; 15 percent pebbles; violently effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary.

A2--2 to 11 inches; light yellowish brown (10YR 6/4) gravelly clay loam, yellowish brown (10YR 5/4) moist; massive; hard, firm, sticky and plastic; few very fine roots; few fine tubular and common very fine interstitial pores; 25 percent pebbles; violently effervescent; moderately alkaline (pH 8.2); gradual smooth boundary.

Bk1--11 to 21 inches; very pale brown (10YR 7/3) very gravelly clay loam, pale brown (10YR 6/3) moist; massive; hard, friable, slightly sticky and plastic; few very fine and fine roots; few very fine and medium tubular pores; violently effervescent with

disseminated and segregated lime; approximately 50 percent (by volume) irregularly shaped, extremely hard, very pale brown (10YR 8/2) lime nodules, 1 to 2 centimeters in diameter; moderately alkaline (pH 8.4); clear wavy boundary.

Bk2--21 to 32 inches; very pale brown (10YR 7/3) extremely gravelly clay loam, pale brown (10YR 6/3) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; violently effervescent with disseminated and segregated lime; approximately 60 percent (by volume) irregularly shaped, extremely hard, very pale brown (10YR 8/2) lime nodules, 1 to 2 centimeters in diameter; moderately alkaline (pH 8.4); clear wavy boundary.

Bk3--32 to 52 inches; very pale brown (10YR 7/3) very gravelly clay loam, pale brown (10YR 6/3) moist; massive; hard, firm, slightly sticky and slightly plastic; few very fine roots; few medium tubular pores; violently effervescent with disseminated and segregated lime; approximately 55 percent (by volume) irregularly shaped, extremely hard, lime nodules, 2 to 5 centimeters in diameter; moderately alkaline (pH 8.4); clear wavy boundary.

Bk4--52 to 65 inches; very pale brown (10YR 7/3) clay loam, pale brown (10YR 6/3) moist; massive; hard, firm, sticky and plastic; few fine and medium roots; few fine tubular pores; violently effervescent with lime in filaments and threads; moderately alkaline (pH 8.4).

Type location: Nye County Nevada; about 2,380 feet north and 2,500 feet east of the southwest corner of section 9, T.17 S., R.50 E.; (36 degrees, 29 minutes, 20 seconds north latitude and 116 degrees, 20 minutes, 56 seconds west longitude.)

Range in Characteristics:

Soil moisture: Moist in all parts from late November until March between the depths of 8 and 15 inches.

Soil temperature: 59 to 64 degrees F.

Calcium carbonate equivalent: More than 40 percent by weight.

Control section:

Coarse fragments--35 to 80 percent fragments in the form of extremely hard lime nodules.

Other features--Lime nodules are less than 5 percent below depths of 40 to 60 inches. Some pedons contain small amounts of gypsum in the lower C horizon. Disseminated lime occurs throughout in some pedons or start in the lower part in other pedons. Coarse fragments in the form of lime nodules are scattered over the surface in some

pedons and make up to 5 percent of the horizon by volume.

Bk horizons:

Hue--10YR to 2.5Y.

Clay content--18 to 35 percent.

Texture--Clay loam or sandy clay loam. Sandy loam in lower part in some pedons.

Downeyville series

The Downeyville series consists of very shallow and shallow, well drained soils that formed in residuum and colluvium derived from volcanic rocks. Downeyville soils are on hills. Slopes are 8 to 75 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 52 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Lithic Haplargids

Typical pedon: Downeyville very gravelly fine sandy loam, in map unit 2251. (Colors are for dry soil unless otherwise noted.)

A1--0 to 3 inches; light brownish gray (10YR 6/2) very gravelly fine sandy loam, dark grayish brown (10YR 4/2) moist; weak fine and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine interstitial pores; 45 percent pebbles and 10 percent cobbles; moderately alkaline (pH 8.0); clear smooth boundary.

A2--3 to 4 inches; very pale brown (10YR 7/3) gravelly fine sandy loam, brown (10YR 4/3) moist; weak thin platy structure parting to weak fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; common very fine, fine and medium roots; common very fine and fine interstitial and tubular pores; 20 percent pebbles; thin lime coatings on undersides of pebbles; moderately alkaline (pH 8.0); clear smooth boundary.

Btk1--4 to 6 inches; pale brown (10YR 6/3) gravelly loam, brown (10YR 4/3) moist; moderate thin platy structure and moderate fine subangular blocky; soft, friable, slightly sticky and slightly plastic; common very fine, fine and medium roots; common very fine and fine interstitial and tubular pores; 30 percent pebbles; moderately thick carbonates on undersides of pebbles; few thin clay films on faces of peds and lining pores; moderately alkaline (pH 8.2); abrupt smooth boundary.

Btk2--6 to 9 inches; very pale brown (10YR 7/4) very cobbly loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, sticky and slightly plastic; common very fine and fine roots; common very fine and fine interstitial and tubular pores; 30 percent pebbles and 20 percent cobbles; moderately thick carbonates on undersides of rock fragments; few thin clay films on faces of peds and lining pores; slightly effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

R--9 inches; fractured volcanic tuff; discontinuous lime and silica cementation in fractures; becomes hard at 13 inches.

Type location: Nye County, Nevada; about 1,000 feet north and 2,100 feet east of the southwest corner of section 27, T.6 S., R.43 E.; (37 degrees, 23 minutes, 04 seconds north latitude and 117 degrees, 08 minutes, 30 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 58 degrees F.

Depth to bedrock: 4 to 14 inches.

Reaction: Moderately alkaline or strongly alkaline.

Effervescence: Slightly effervescent to violently effervescent.

Control section:

Clay content--14 to 25 percent.

Rock fragments--35 to 60 percent.

A horizon:

Hue--7.5YR, 10YR.

Value--6 or 7 dry, 3 through 5 moist.

Chroma--2 or 3.

Btk horizon:

Value--5 through 7 dry, 3 through 5 moist.

Chroma--2 through 4.

Texture (less than 2 millimeters)--Loam, fine sandy loam and some pedons may have silt loam subhorizons.

Clay content--18 to 27 percent.

Rock fragments--Average 5 to 20 percent cobbles and stones; 30 to 50 percent pebbles.

Reaction--Moderately alkaline or strongly alkaline.

Effervescence--Slightly effervescent to violently effervescent in lower part.

Secondary lime and silica--Carbonates and accessory silica in the form of pendants on undersides of pebbles ranging from few to many. Other features--The upper part of the argillic horizon may not contain identifiable secondary carbonates or may not be effervescent in some pedons.

Espint series

The Espint series consists of very shallow and shallow, well drained soils that formed in residuum and colluvium derived from volcanic rocks. Espint soils are on mountains and hills. Slopes are 2 to 50 percent. Mean annual precipitation is about 8 inches and mean annual temperature is about 52 degrees F.

Taxonomic class: Clayey, smectitic, mesic, shallow Xeric Haplargids

Typical pedon: Espint very gravelly fine sandy loam, in map unit 2682. (Colors are for dry soil unless otherwise noted.)

A--0 to 1 inch; brown (10YR 5/3) very gravelly fine sandy loam, brown (10YR 4/3) moist; weak thin platy structure parting to moderate very fine granular; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine interstitial pores; 45 percent pebbles; moderately alkaline (pH 8.0); abrupt smooth boundary.

Bt1--1 to 3 inches; brown (10YR 5/3) gravelly sandy clay loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure parting to moderate very fine granular; soft, very friable, sticky and slightly plastic; common very fine and fine roots; many very fine and fine interstitial pores; 20 percent pebbles and 2 percent cobbles; few thin clay films lining pores; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bt2--3 to 7 inches; yellowish brown (10YR 5/4) gravelly clay, dark yellowish brown (10YR 4/4) moist; moderate fine subangular blocky structure; slightly hard, friable, sticky and plastic; common very fine and fine, and few medium roots; many very fine and fine interstitial and tubular pores; 30 percent pebbles; few thin clay films on faces of peds and lining pores; slightly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Cr--7 inches; weathered saprolite from tuff. Fractures contain few coarse roots.

Type location: Nye County, Nevada; approximately 7 miles northeast of Goldfield, about 600 feet north and 2,200 feet west of the southeast corner of section 14,

T.2 S., R.43 E.; (37 degrees, 45 minutes, 34 seconds north latitude and 117 degrees, 07 minutes, 19 seconds west longitude.)

Range in Characteristics:

Soil moisture: Moist in winter and spring months, dry in summer and fall except for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to paralithic: 6 to 14 inches.

Reaction: Slightly alkaline or moderately alkaline.

Control section:

Clay content--35 to 50 percent.

Rock fragments--10 to 30 percent, mainly pebbles.

A horizon:

Hue--10YR or 7.5YR.

Value--5 or 6 dry, 3 or 4 moist.

Chroma--2 or 3.

Effervescence--Commonly noncalcareous, but ranges to strongly effervescent in some pedons due to eolian deposition.

Bt1 horizon:

Hue--10YR or 7.5YR.

Value--5 or 6 dry, 4 or 5 moist.

Chroma--3 or 4.

Texture (less than 2 millimeters)--Sandy clay loam, clay loam; some pedons have sandy clay or clay in the Bt1 horizons.

Clay content--27 to 40 percent.

Rock fragments--10 to 30 percent, mainly pebbles and cobbles.

Bt2 horizon:

Hue--10YR, 7.5YR or 5YR.

Value--5 or 6 dry, 4 or 5 moist.

Chroma--3 through 6.

Texture (less than 2 millimeters)--Clay loam, sandy clay, or clay.

Clay content--35 to 60 percent.

Rock fragments--10 to 30 percent, mainly pebbles.

Effervescence--Slightly effervescent or strongly effervescent.

Other features--Thin silica-lime pendants are on rock fragments in some pedons. This layer commonly reflects the color of the saprolitic material from which it formed.

Fang series

The Fang series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks.

Fang soils are located on inset fans. Slopes are 0 to 2 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 56 degrees F.

Taxonomic class: Coarse-loamy, mixed, superactive, calcareous, mesic Typic Torriorthents

Typical pedon: Fang sandy loam, in map unit 2532. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; light brownish gray (10YR 6/2) sandy loam, dark grayish brown (10YR 4/2) moist; weak thin and medium platy structure; soft, very friable, nonsticky and nonplastic; many very fine roots; many very fine, fine and medium vesicular pores; slightly effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

C1--3 to 10 inches; light gray (10YR 7/2) fine sandy loam, dark brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few medium, many very fine and fine roots; many very fine and fine, and few medium tubular pores; slightly effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

C2--10 to 21 inches; very pale brown (10YR 7/3) fine sandy loam, dark brown (10YR 4/3) moist; massive; slightly hard, friable, nonsticky and slightly plastic; many very fine and few medium roots; many very fine and fine tubular pores; slightly effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

C3--21 to 42 inches; very pale brown (10YR 7/3) fine sandy loam with a few thin lenses of silt loam; dark brown (10YR 4/3) moist; massive lenses are platy; soft, very friable, nonsticky and slightly plastic; many fine and very fine roots; many fine and very fine tubular pores; slightly effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

2C--42 to 60 inches; pale brown (10YR 6/3) very gravelly sand, dark brown (10YR 4/3) moist; single grain; loose when dry and moist; many very fine roots; many very fine and fine interstitial pores; 55 percent fine pebbles; slightly effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

Type location: Nye County, Nevada; approximately 5 miles southeast of Lida Junction, about 2,000 feet north and 900 feet west of the projected southeast corner of section 3, T.6 S., R.43 E.; (37 degrees, 26 minutes, 42 seconds north latitude and 117 degrees, 08 minutes, 02 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in late winter and early spring and for 10 to 20 days between July and October due to convection storms.

Soil temperature: 54 to 59 degrees F.

Reaction: Slightly alkaline to strongly alkaline.

Control section:

Clay content--12 to 18 percent.

Sand--More than 30 percent fine sand and coarser.

Rock fragments--0 to 15 percent when mixed, some strata may contain up to 60 percent.

A horizon:

Hue--10YR or 2.5Y.

Value--5 through 7 dry, 4 or 5 moist.

Chroma--2 or 3.

Effervescence--Noneffervescent to strongly effervescent.

C horizons:

Value--5 through 7 dry, 4 or 5 moist.

Chroma--Usually 2 or 3, but may be 4 in some pedons.

Texture--Fine sandy loam or sandy loam.

Effervescence--Slightly effervescent to violently effervescent.

Other features--Contains appreciable amount of volcanic ash, glass or other pyroclastic materials.

Ferrogold series

The Ferrogold series consists of shallow to a petrocalcic, well drained soils that formed in alluvium mainly from limestone and dolomite. Ferrogold soils are on partial ballenas and fan remnants and have slopes of 2 to 30 percent. The mean annual precipitation is about 7 inches and the mean annual air temperature is about 60 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, thermic, shallow Calcic Petrocalcids

Typical pedon: Ferrogold extremely gravelly loam, recreation land and wildlife habitat. (Colors are for dry soil unless otherwise noted.) The surface is covered by approximately 65 percent pebbles, 5 percent cobbles, and 1 percent stones.

A--0 to 3 inches; very pale brown (10YR 7/3) extremely gravelly loam, yellowish brown (10YR 5/4) moist; moderate very thick platy structure; soft, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine and common fine and medium vesicular pores; 60 percent pebbles, 5 percent cobbles, and 1 percent stones; violently effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Bk--3 to 9 inches; very pale brown (10YR 7/4) very gravelly loam, yellowish brown (10YR 5/4) moist;

weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine, fine and few medium roots; common very fine and few fine interstitial and tubular pores; common fine and very fine soft masses of lime; 40 percent pebbles; violently effervescent; moderately alkaline (8.4 pH); clear wavy boundary.

Bkq--9 to 15 inches; very pale brown (10YR 7/3) very gravelly loam, light yellowish brown (10YR 6/4) moist; massive; hard, firm, slightly sticky and nonplastic; common very fine and few fine and medium roots; few very fine and fine interstitial and tubular pores; common (10 percent) soft masses of lime and many (80 percent) thick lime coats on rock fragments with few thin patchy coats of silica; 50 percent pebbles and pan fragments and 2 percent cobbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bkqm--15 to 60 inches; very pale brown (10YR 7/3) and very pale brown (10YR 8/3) very strongly cemented material, very pale brown (10YR 8/2) to very pale brown (10YR 7/3) moist; massive; rigid and very rigid; many (50 percent) lenses of weakly cemented material in the lower part.

Type location: Nye County, Nevada; approximately 4 miles east of Pahrump on the Wheeler Pass road; about 1,400 feet south and 950 feet east of the northwest corner of section 3, T.20 S., R.54 E.; (36 degrees, 14 minutes, 35 seconds north latitude and 115 degrees, 53 minutes, 53 seconds west longitude) NAD 1927; Pahrump quadrangle.

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring. The ratio of actual evapotranspiration between summer and winter is about 0.4, typical of the Mojave Desert. Typic-Aridic soil moisture regime.

Soil temperature: 59 to 66 degrees F.

Depth to petrocalcic horizon: 14 to 20 inches.

Control section:

Percent clay--10 to 18 percent.

Texture--Loam or fine sandy loam.

Rock fragments--35 to 70 percent, mainly pan fragments and limestone or dolomite pebbles.

Calcium carbonate equivalent--Fine earth fraction averages 25 to 50 percent; less than 20 mm fraction averages 40 to 70 percent.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Reaction--Moderately alkaline

Bk and Bkq horizons:

Value--5 or 6 dry.

Chroma--3 or 4.

Clay content--10 to 18 percent.

Texture--Loam or fine sandy loam.

Rock fragments--35 to 70 percent, mainly pan fragments and limestone or dolomite pebbles.

Structure--Weak or moderate subangular blocky.

Effervescence--Strongly effervescent or violently effervescent.

Other features--Identifiable secondary carbonates as lime coatings on rock fragments and soft masses range from 3 to 40 percent; thick (> 15cm) subhorizons have more than 5 percent by volume. Secondary silica as patchy coatings on rock fragments in most pedons.

Bkqm horizon:

Value--7 or 8 dry.

Structure--Massive or platy.

Pan thickness--Greater than 2 feet thick.

Cementation--Very strongly cemented with lenses that are weakly cemented or moderately cemented. Calcium carbonate is the primary cementing agent, with minor amounts of silica.

Fuegosta series

The Fuegosta series consist of shallow over a duripan well drained soils that formed in alluvium derived from mixed rocks. Fuegosta soils are on fan remnants. Slopes are 2 to 4 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 53 degrees.

Taxonomic class: Clayey, smectitic, mesic shallow Abruptic Argidurids

Typical pedon: Fuegosta gravelly fine sandy loam, in map unit 2510. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 80 percent pebbles, 4 percent cobbles, and 1 percent stones.

A--0 to 4 inches; light gray (10YR 7/2) gravelly fine sandy loam, light yellowish brown (10YR 6/4) moist; weak thin platy structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; common fine and medium vesicular pores; 25 percent pebbles; strongly effervescent; strongly alkaline (pH 8.8); abrupt smooth boundary.

Bt1--4 to 8 inches; reddish brown (5YR 5/4) gravelly clay, reddish brown (5YR 4/4) moist; weak coarse prismatic structure parting to moderate fine subangular blocky; slightly hard, friable, sticky and plastic; common very fine roots; common very fine tubular and few very fine interstitial pores; common thin clay films on faces of peds and lining pores; 25 percent pebbles; slightly effervescent; moderately alkaline (pH 8.0); clear smooth boundary.

Bt2--8 to 14 inches; reddish brown (5YR 5/4) gravelly clay, reddish brown (5YR 4/4) moist; weak coarse prismatic structure parting to moderate fine and medium subangular blocky; hard, firm, sticky and plastic; common very fine and few medium roots; common fine tubular pores; common moderately thick clay films on faces of peds and lining pores; 20 percent pebbles; slightly effervescent; moderately alkaline (pH 8.0); clear smooth boundary.

Bk--14 to 18 inches; light brown (7.5YR 6/4) very gravelly sandy loam, dark brown (7.5YR 4/4) moist; weak fine subangular blocky structure parting to moderate thin platy; slightly hard, friable, slightly sticky and slightly nonplastic; common very fine roots; common very fine tubular pores; 35 percent pebbles, mainly pan fragments; common moderately thick lime coats in seams; strongly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bqkm1--18 to 26 inches; very pale brown (10YR 8/3) indurated duripan, very pale brown (10YR 7/3) moist; massive; extremely hard, extremely firm; violently effervescent; clear irregular boundary.

Bqkm2--26 to 60 inches; very pale brown (10YR 8/3) strongly silica-lime cemented strata up to 12 inches thick alternating with strata of extremely gravelly loamy coarse sand up to 6 inches thick, very pale brown (10YR 7/3) moist; massive; violently effervescent.

Type location: Nye County, Nevada; approximately 1 mile northwest of Stonewall Pass, about 450 feet south and 1,200 feet east of the projected northwest corner of section 28, T.6 S., R.43 E.; (37 degrees, 23 minutes, 41 seconds north latitude and 117 degrees, 09 minutes, 47 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during the winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 54 to 59 degrees F.

Depth to duripan: 16 to 20 inches.

Depth to base of Bt horizon: 11 to 18 inches.

Control section:

Clay content--35 to 50 percent.

Rock fragments--20 to 35 percent.

A horizon:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--2 through 4.

Effervescence--Slightly effervescent to strongly effervescent.

Bt horizon:

Hue--5YR or 7.5YR.

Value--5 or 6 dry, 3 through 5 moist.

Chroma--2 through 4.

Texture (less than 2 millimeters)--Clay loam or clay.

Rock fragments--20 to 30 percent, mainly pebbles.

Effervescence--Slightly effervescent to strongly effervescent.

Bk horizon:

Hue--5YR or 7.5YR.

Value--5 or 6 dry, 4 or 5 moist.

Chroma--2 through 4.

Rock fragments--35 to 50 percent, mainly pan fragments.

Reaction--Moderately alkaline to strongly alkaline

Bqkm horizon:

Rupture resistance--Indurated in upper part. Lower part has weakly to strongly cemented layers alternating with strata of extremely gravelly loamy coarse sand.

Gabbvally series

The Gabbvally series consists of very shallow and shallow, well drained soils that formed in residuum and colluvium from volcanic rocks. Gabbvally soils are on hills and mountains. Slopes are 15 to 50 percent. Mean annual precipitation is about 10 inches and mean annual temperature is about 50 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Lithic Xeric Haplagids

Typical pedon: Gabbvally very gravelly loam, in map unit 2682, rangeland. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 50 percent pebbles and 1 percent stones.

A--0 to 4 inches; brown (10YR 5/3) very gravelly loam, dark brown (10YR 3/3) moist; weak fine to medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; few very fine roots; many fine interstitial pores; 35 percent pebbles; neutral (pH 7.2); clear smooth boundary.

Bt1--4 to 7 inches; yellowish brown (10YR 5/4) very gravelly loam, dark yellowish brown (10YR 4/4) moist; moderate fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common fine tubular pores; 35 percent pebbles and 5 percent cobbles; common thin clay films on faces of peds and lining pores; slightly alkaline (pH 7.4); clear smooth boundary.

Bt2--7 to 12 inches; yellowish brown (10YR 5/4) very gravelly loam, dark yellowish brown (10YR 4/4) moist; moderate fine subangular blocky structure; slightly hard, friable, sticky and plastic; common very fine and fine roots; common fine tubular pores; 35 percent pebbles and 5 percent cobbles; common thin clay films on faces of peds and lining pores; slightly alkaline (pH 7.4); abrupt wavy boundary.

R--12 inches; hard, fractured black ignimbrite.

Type location: Nye County, Nevada; approximately 6 miles northeast of Goldfield, about 100 feet east and 150 feet south of the northwest corner of section 23, T.2 S., R.43 E.; (37 degrees, 45 minutes, 27 seconds north latitude and 117 degrees, 07 minutes, 56 seconds west longitude.)

Range in Characteristics:

Soil moisture: Moist in winter and spring months, dry in summer and fall except for 10 to 20 days between July and October due to convection storms.

Soil temperature: 53 to 60 degrees F.

Depth to bedrock: 6 to 14 inches.

Reaction: Neutral or slightly alkaline.

Control section:

Clay content--15 to 25 percent.

Rock fragments--35 to 50 percent, mainly pebbles.

A horizon:

Value--5 or 6 dry, 3 or 4 moist.

Chroma--3 or 4 dry or moist.

Bt horizon:

Value--5 or 6 dry, 3 or 4 moist.

Chroma--3 or 4 dry or moist.

Clay content--18 to 27 percent.

Texture (less than 2 millimeters)--Sandy clay loam, loam, sandy loam.

Structure--Subangular blocky or angular blocky.

Rock fragments--35 to 50 percent.

Consistence--Soft or slightly hard, very friable or friable, slightly sticky or sticky, and slightly plastic or plastic.

Greyeagle series

The Greyeagle series consists of shallow, somewhat excessively drained soils that formed in alluvium derived from mixed rocks. Greyeagle soils are on fan remnants. Slopes are 2 to 40 percent. Mean annual precipitation is 6 inches and mean annual temperature is 63 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic, shallow Typic Haplodurids

Typical pedon: Greyeagle very gravelly sandy loam, in map unit 2215, rangeland. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 60 percent pebbles and 5 percent cobbles.

A1--0 to 3 inches; very pale brown (10YR 7/3) very gravelly sandy loam, brown (10YR 5/3) moist; strong thick platy structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine vesicular and interstitial pores; 50 percent pebbles and 5 percent cobbles; violently effervescent; moderately alkaline (pH 8.0); abrupt smooth boundary.

A2--3 to 6 inches; light yellowish brown (10YR 6/4) gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; few fine interstitial pores; 15 percent pebbles; violently effervescent; moderately alkaline (pH 8.1); clear wavy boundary.

Bk--6 to 8 inches; very pale brown (10YR 7/3) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; few fine roots; few fine interstitial pores; 40 percent pebbles; medium irregular soft masses of lime and coatings less than 1 millimeter thick on pebbles; violently effervescent; moderately alkaline (pH 8.0); clear wavy boundary.

2Bqkm--8 to 24 inches; white (10YR 8/2) continuous duripan with thin indurated laminations between layers of cemented gravel, very pale brown (10YR 7/4) moist; massive; extremely hard; clear smooth boundary.

2Bk--24 to 60 inches; very pale brown (10YR 7/4) extremely gravelly loamy sand; massive; very hard, firm; moderately alkaline (pH 8.2).

Type location: Nye County, Nevada; about 1,600 feet north and 1,900 feet west of the southeast corner of section 36, T.11 S., R.46 E.; (36 degrees, 56 minutes, 02 seconds north latitude and 116 degrees, 46 minutes, 35 seconds west longitude.)

Range in Characteristics:

Soil moisture: Dry throughout from June until late November for about 180 days. Intermittently moist for 10 to 20 day from July through October following convection storms.

Soil temperature: About 62 to 68 degrees F.

Depth to indurated duripan: Ranges from 4 to 20 inches.

Control section:

Clay content--10 to 18 percent.

A horizons:

Hue--10YR or 7.5YR.

Bk horizon:

Hue--10YR 7.5YR.

Texture--Very gravelly sandy loam or very gravelly loamy sand.

2Bqkm horizon:

Structure--Stratified alluvium that is massive and extremely hard or very hard when dry.

Rupture resistance--Very strongly cemented to indurated.

2Bk horizon:

Texture--Underlying the 2Bqkm horizon is mixed, extremely gravelly stratified alluvium.

Consistence--Extremely hard or very hard when dry. It can be dug with a pick and shovel but with difficulty.

Gynelle series

The Gynelle series consists of very deep, somewhat excessively drained soils that formed in alluvium derived from mixed rocks. Gynelle soils are on alluvial flats. Slopes are 0 to 4 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Sandy-skeletal, mixed, mesic Typic Torriorthents

Typical pedon: Gynelle very gravelly loamy sand located in map unit 4070. (Colors are for dry soil unless otherwise noted.)

A1--0 to 3 inches; light gray (10YR 7/2) very gravelly loamy sand, dark grayish brown (10YR 4/2) moist; massive; soft, very friable, nonsticky and nonplastic; many very fine and fine interstitial pores; 35 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

A2--3 to 8 inches; pale brown (10YR 6/3) very gravelly sand, brown (10YR 4/3) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; common fine and medium roots; many very fine and fine interstitial pores; 40 percent pebbles; slightly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk--8 to 14 inches; light brownish gray (10YR 6/2) very gravelly sandy loam, dark grayish brown (10YR 4/2) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine and fine roots; many very fine and fine interstitial pores; few moderately thick white (10YR 8/1) lime pendants on lower surface of cobbles and pebbles; 50 percent pebbles and 5 percent cobbles; violently effervescent; strongly alkaline (pH 9.0); clear wavy boundary.

2C1--14 to 38 inches; pale brown (10YR 6/3) very gravelly sand, brown (10YR 4/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few fine roots; many very fine and fine interstitial pores; 40 percent pebbles and 10 percent cobbles; slightly effervescent; strongly alkaline (pH 8.8); abrupt smooth boundary.

3C2--38 to 60 inches; pale brown (10YR 6/3) very gravelly sand, brown (10YR 4/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few fine roots; many fine and medium interstitial pores; 55 percent pebbles; slightly effervescent; strongly alkaline (pH 8.8)

Type location: Nye County, Nevada; approximately 1 mile southwest of Bonnie Claire, about 2,650 feet north and 3,550 feet west of the projected southeast corner of section 26, T.8 S., R.43 E.; (37 degrees, 12 minutes, 52 seconds north latitude and 117 degrees, 07 minutes, 29 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 55 to 59 degrees F.

Depth to Bk horizon: 4 to 14 inches.

Reaction: Moderately alkaline to very strongly alkaline.

Effervescence: Slightly effervescent to violently effervescent.

Control section:

Rock fragments--35 to 60 percent.

A horizons:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 or 3.

Other features--Thin horizon (3 inches thick) of gravelly sandy loam or sandy clay loam may be present in some pedons.

Bk and C horizons:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 or 3.

Texture--(less than 2 millimeters) Stratified sand, loamy sand, coarse sand and a subhorizon of sandy loam is present. Averages loamy coarse sand, sand, or loamy sand.

Structure--Massive, single grain or weak subangular blocky.

Rock fragments--Average 35 to 60 percent mainly pebbles, any strata may have up to 80 percent rock fragments with 40 percent cobbles and stones.

Salinity--4 to 8 millimhos/centimeters average.

Consistence--Loose to slightly hard dry, very friable moist or is loose.

Other features--Horizons are stratified. Lime occurs as pendants in one or more horizons in most pedons. Lime coated pebbles are present in some pedons.

Haleburu series

The Haleburu series consists of very shallow and shallow, well drained soils that formed in colluvium and residuum derived from volcanic rocks. Haleburu soils are on hills. Slopes range from 15 to 50 percent. Mean annual precipitation is about 6 inches and the mean annual temperature is about 65 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, thermic Lithic Torriorthents

Typical pedon: Haleburu extremely gravelly sandy loam, in map unit 2301. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; pale brown (10YR 6/3) extremely gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; massive; soft, very friable, slightly sticky and nonplastic; common very fine and fine and few medium roots; few very fine and fine interstitial and few fine tubular pores; 55 percent pebbles and 5

percent cobbles; strongly effervescent; slightly alkaline (pH 7.6); clear smooth boundary.

Bk--3 to 11 inches; pale brown (10YR 6/3) very gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; massive; soft, very friable, slightly sticky and nonplastic; many very fine and fine roots; few fine interstitial and common fine tubular pores; few thin lime coatings on rock fragments; 30 percent pebbles and 5 percent cobbles; strongly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.
R--11 inches; lime coated bedrock.

Type location: Nye County Nevada, about 2,500 feet east and 800 feet south of the northwest corner of section 33, T.12 S., R.47 E.; (36 degrees, 51 minutes, 17 seconds and 116 degrees, 43 minutes, 30 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for brief periods between winter and early spring and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 66 to 71 degrees F.

Depth to bedrock: 4 to 14 inches.

Control section:

Percent clay--6 to 18 percent.

Rock fragments--Averages 35 to 65 percent in the control section, with the surface horizon having more than 65 percent.

Reaction--Moderately alkaline or strongly alkaline.

A horizon:

Hue--10YR or 7.5YR.

Value--5 or 6 dry and 3 through 5 moist.

Chroma--3 or 4.

Bk horizon:

Hue--10YR or 7.5YR.

Value--5 through 7 dry, 3 through 5 moist.

Chroma--3 or 4.

Other features--Lime content ranges up to 15 percent and is mainly disseminated, but also occurs as coatings on the rock fragments.

Haymont series

The Haymont series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Haymont soils are on alluvial flats. Slopes are 0 to 4 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 63 degrees F.

Taxonomic class: Coarse-silty, mixed, superactive, calcareous, thermic Typic Torriorthents

Typical pedon: Haymont very fine sandy loam, in map unit 3320. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; pale brown (10YR 6/3) very fine sandy loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine roots; many very fine interstitial pores; strongly effervescent; strongly alkaline (pH 8.8) clear smooth boundary.

C1--3 to 10 inches; pale brown (10YR 6/3) silt loam, dark yellowish brown (10YR 4/4) moist; massive; slightly hard, very friable, sticky and slightly plastic; common very fine roots; common very fine interstitial and few fine tubular pores; strongly effervescent; strongly alkaline (pH 8.8); clear smooth boundary.

C2--10 to 25 inches; light yellowish brown (10YR 6/4) very fine sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots, few very fine and common fine tubular pores; strongly effervescent; strongly alkaline (pH 8.6) clear smooth boundary.

C3--25 to 40 inches; light yellowish brown (10YR 6/4) very fine sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; common fine tubular pores; strongly effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

C4--40 to 60 inches; light yellowish brown (10YR 6/4) highly stratified fine sandy loam and silt loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; few very fine roots; strongly effervescent; strongly alkaline (pH 8.6).

Type location: Nye County, Nevada; in the northern part of Pahrump Valley, about 2,075 feet south and 275 feet east of the northwest corner of section 9, T.19 S., R.53 E.; (36 degrees, 18 minutes, 59 seconds north latitude and 116 degrees, 01 minute, 50 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. Upper part of the soil moisture control section is moist for a short time in late winter and early spring and for 10 to 20 days following summer convection storm between July through mid October.

Soil temperature: 59 to 65 degrees F.

Calcium carbonate equivalent: 10 to 35 percent.

Control section:

Clay content--5 to 18 percent with less than 15 percent fine sand or coarser.

Rock fragments--Less than 5 percent.

A horizon:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--3 or 4 dry or moist.

C horizon:

Value--5 through 7 dry.

Chroma--3 or 4 dry, 4 or 5 moist.

Texture--Dominantly very fine sandy loam with less than 15 percent fine sand or coarser. Below 40 inches is stratified fine sandy loam, silt loam, loam, and very fine sandy loam.

Structure--Massive or platy.

Consistence--Soft or slightly hard.

Reaction--Moderately alkaline to very strongly alkaline.

Irongold Series

The Irongold series consists of shallow to a hardpan, well drained soils that formed in alluvium derived from limestone. Irongold soils are on fan remnants and have slopes of 2 to 8 percent. The mean annual precipitation is about 6 inches and the mean annual temperature is about 60 degrees F.

Taxonomic class: Loamy, mixed, superactive, thermic, shallow Typic Petrocalcids

Typical pedon: Irongold extremely gravelly loam, located in map unit 870 in the adjacent Clark County Area, Nevada, soil survey. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 65 percent pebbles, 5 percent cobbles, and 1 percent stones.

A1--0 to 1 inch; pale brown (10YR 6/3) extremely gravelly loam, brown (10YR 4/3) moist; strong thick platy structure parting to moderate medium platy; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine and few fine vesicular pores; 65 percent pebbles, 5 percent cobbles, and 1 percent stones; violently effervescent (17 percent calcium carbonate equivalent less than 2 millimeter fraction); moderately alkaline (pH 8.4); clear smooth boundary.

A2--1 to 7 inches; pale brown (10YR 6/3) gravelly loam, brown (10YR 4/3) moist; moderate fine and medium

platy structure; soft, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine vesicular and few very fine and fine interstitial pores; 15 percent pebbles; violently effervescent (18 percent calcium carbonate equivalent, in the less than 2 millimeter fraction); moderately alkaline (pH 8.4); clear smooth boundary.

Bk--7 to 11 inches; light yellowish brown (10YR 6/4) gravelly loam, yellowish brown (10YR 5/4) moist; moderate medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine and few fine and medium roots; common very fine and few fine tubular and interstitial pores; 25 percent pebbles, 3 percent cobbles, and 2 percent stones; many thin lime coats and pendants on the undersides of rock fragments; violently effervescent (25 percent calcium carbonate equivalent in the less than 2 millimeter fraction); moderately alkaline (pH 8.4); abrupt wavy boundary.

Bkm--11 to 34 inches; white (10YR 8/1) continuous strongly cemented petrocalcic, white (10YR 8/2) moist; weak very thick platy structure; very hard, very firm, brittle; common very fine and few fine roots in fractures; thin continuous laminar cap (1 millimeter) covering plates; 80 percent of hardpan dissolves in concentrated hydrochloric acid; violently effervescent; clear wavy boundary.

2Bk--34 to 60 inches; very pale brown (10YR 7/3) extremely gravelly loamy coarse sand, pale brown (10YR 6/3) moist; massive; hard, firm, nonsticky and nonplastic; few very fine roots; many very fine and few fine and medium interstitial pores; 75 percent pebbles; many thin lime coats and pendants on the undersides of coarse fragments; 30 percent discontinuous weak cementation in bands; violently effervescent (60 percent calcium carbonate equivalent in the less than 2 millimeter fraction); strongly alkaline (pH 8.8).

Type location: Clark County, Nevada; approximately 2.7 miles northwest of Goodsprings, Nevada; about 1,000 feet west and 1,500 feet north of the southeast corner of section 16, T.24 S., R.58 E.; (35 degrees, 51 minutes, 39 seconds north latitude and 115 degrees, 28 minutes, 13 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring and for 10 to 20 days cumulative between July to October following convection storms.

Soil temperature: 59 to 64 degrees F.

Depth to petrocalcic: 10 to 14 inches.

Control section:

Percent clay--8 to 16 percent.

Rock fragments--Averages 25 to 30 percent, mainly pebbles.

Calcium carbonate equivalent--25 to 40 percent of the less than 20 millimeter fraction.

A horizons:

Chroma--3 or 4.

Calcium carbonate equivalent--15 to 30 percent of the less than 2 millimeter fraction.

Bk horizon:

Value--4 or 5 moist.

Chroma--4 through 6.

Texture--Loam or sandy loam.

Clay content--8 to 16 percent.

Rock fragments--25 to 45 percent, mainly pebbles.

Calcium carbonate equivalent--20 to 30 percent of the less than 2 millimeter fraction.

Other features--Some pedons contain common fine soft lime nodules.

Bkm horizon:

Structure--Platy or massive.

Cementation--75 to 95 percent of volume dissolves in acid.

2Bk horizon:

Consistence--Slightly hard or hard, friable or firm.

Clay content--2 to 8 percent.

Rock fragments--65 to 80 percent, mainly pebbles.

Calcium carbonate equivalent--50 to 70 percent of the less than 2 millimeter fraction.

Izo series

The Izo series consists of very deep, excessively drained soils that formed in alluvium derived from mixed rocks. Izo soils are on inset fans and drainageways. Slopes are 0 to 15 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Sandy-skeletal, mixed, mesic Typic Torriorthents

Typical pedon: Izo very gravelly sand, in map unit 2550, rangeland. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; pale brown (10YR 6/3) very gravelly sand, brown (10YR 4/3) moist; single grain; loose,

nonsticky and nonplastic; common very fine roots; many very fine interstitial pores; 35 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

C1--3 to 9 inches; pale brown (10YR 6/3) very gravelly sand, brown (10YR 4/3) moist; single grain; loose, nonsticky and nonplastic; common very fine and fine roots; many very fine interstitial pores; 40 percent pebbles and 2 percent cobbles; strongly effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

C2--9 to 20 inches; pale brown (10YR 6/3) stratified gravelly loamy coarse sand and very gravelly coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine, fine, and few medium roots; many very fine, fine and medium interstitial pores; 45 percent pebbles and 5 percent cobbles; strongly effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

C3--20 to 35 inches; pale brown (10YR 6/3) stratified gravelly loamy coarse sand and extremely gravelly coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and fine roots; many very fine, fine and medium interstitial pores; 50 percent pebbles and 5 percent cobbles; strongly effervescent; strongly alkaline (pH 8.8); abrupt wavy boundary.

C4--35 to 60 inches; pale brown (10YR 6/3) very gravelly coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and fine roots; many very fine, fine and medium interstitial pores; 45 percent pebbles, strongly effervescent; strongly alkaline (pH 8.8).

Type location: Nye County Nevada; about 3 miles southeast of Ralston mining camp, about 200 feet north and 800 feet west of the southeast corner of section 36, T.4 S., R.43 E.; (37 degrees, 32 minutes, 37 seconds north latitude and 117 degrees, 05 minutes, 55 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods in winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Control section:

Rock fragments--50 to 75 percent, mainly pebbles larger than 13 millimeters in diameter.

Reaction--Moderately alkaline or strongly alkaline, commonly increasing with depth.

Effervescence--Slightly effervescent or strongly effervescent. Individual thin strata may be noneffervescent in some pedons.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Other features--This horizon is commonly structureless or has finely stratified rock structure and does not qualify as an ochric epipedon.

C horizons:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Structure--Massive or single grain.

Texture (less than 2 millimeters)--Stratified sand, coarse sand, loamy sand, or loamy coarse sand.

Rock fragments--50 to 75 percent, predominantly pebbles. Individual strata may range from 15 to 85 percent rock fragments.

Consistence--Loose or soft, loose or very friable.

Segregated lime--Some pedons have up to 50 percent thin lime coating on undersides of rock fragments.

Jonnic series

The Jonnic series consists of moderately deep to a duripan well drained soils that formed in alluvium derived from mixed rocks. Jonnic soils are on fan remnants. Slopes are 4 to 8 percent. Mean annual precipitation is about 9 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Clayey-skeletal, smectitic, thermic Xeric Argidurids

Typical pedon: Jonnic gravelly loam, in map unit 2140. (Colors are for dry soil unless otherwise noted.)

A--0 to 2 inches; very pale brown (10YR 7/4) gravelly loam, yellowish brown (10YR 5/4) moist; moderate thick platy structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; common very fine and fine vesicular pores; 25 percent pebbles, 1 percent cobbles, and 1 percent stones; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Bt--2 to 9 inches; reddish yellow (7.5YR 6/6) very gravelly clay loam, strong brown (7.5YR 5/6) moist; weak medium subangular blocky structure; soft, very friable, sticky and plastic; common very fine and few fine roots; common very fine and few fine interstitial pores; few thin clay films on faces of peds and lining pores; 40 percent pebbles and 2 percent cobbles; few very thin white lime coats on undersides of rock fragments; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Btk1--9 to 21 inches; reddish yellow (7.5YR 6/6) very gravelly clay, strong brown (7.5YR 5/6) moist; moderate medium subangular blocky structure; slightly hard, friable, sticky and plastic; few very fine and common fine roots; few very fine tubular pores; few thin clay films bridging sand grains; 40 percent pebbles and 3 percent cobbles; 15 percent medium soft lime masses; few thin lime and silica pendants on undersides of rock fragments; violently effervescent; strongly alkaline (pH 8.6).

Btk2--21 to 38 inches; reddish yellow (7.5YR 6/6) extremely cobbly sandy clay loam, strong brown (7.5YR 5/6) moist; weak fine subangular blocky structure; soft, very friable, sticky and plastic; few very fine roots; common very fine and few fine interstitial pores; 40 percent pebbles and 35 percent cobbles; thin lime-silica coats on undersides of rock fragments; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Bqkm--38 to 42 inches; indurated white (10YR 8/1) silica-lime hardpan; massive; extremely hard, extremely firm; 45 percent pebbles and 5 percent cobbles; thin alternating lenses are strongly cemented and are very hard and very firm.

Type location: Nye County, Nevada; approximately 1 mile east of Highway 160 near the old mining town of Johnnie, about 400 feet north and 200 feet west of the southeast corner of section 6, T.18 S., R.53 E.; (36 degrees, 24 minutes, 40 seconds north latitude and 116 degrees, 03 minutes, 04 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. Moist in late winter and spring, and for 10 to 20 days in the upper part from July to October from convection storms.

Soil temperature: 63 to 69 degrees F.

Depth to duripan: 25 to 40 inches.

Control section:

Clay content--35 to 50 percent, weighted average.

Rock fragments--35 to 45 percent pebbles, 2 to 5 percent cobbles, 0 to 5 percent stones.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Reaction--Moderately alkaline or strongly alkaline.

Bt and Btk1 horizons:

Chroma--5 or 6 dry or moist.

Texture of fine earth--Clay loam or clay.

Clay content--35 to 55.

Rock fragment--35 to 50 percent mainly pebbles. 0 to 5 percent cobbles.

Btk2 horizon:

Texture of fine earth--Sandy clay loam or clay loam.

Clay content--25 to 35 percent.

Rock fragments--30 to 40 percent pebbles, 20 to 35 percent cobbles, and 0 to 5 percent stones.

Bqkm horizon:

Rupture resistance--Very strongly cemented or indurated. Thin alternating lenses are strongly cemented.

Kanackey series

The Kanackey series consists of very shallow and shallow, well drained soils that formed in residuum derived from quartzite, schist and minor amounts of tuff. Kanackey soils are on mountains. Slopes are 15 to 50 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 61 degrees F.

Taxonomic class: Clayey-skeletal, smectitic, thermic Lithic Haplargids

Typical pedon: Kanackey very gravelly loam, in map unit 2870. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 65 percent pebbles, 10 percent cobbles, and 1 percent stones.

A--0 to 3 inches; light brownish gray (10YR 6/2) very gravelly loam, grayish brown (10YR 5/2) moist; weak medium platy structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; many fine and medium vesicular and common very fine tubular pores; 30 percent pebbles and 15 percent cobbles; strongly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bt1--3 to 7 inches; reddish brown (5YR 5/3) very cobbly clay; reddish brown (5YR 4/3) moist; strong medium subangular blocky structure; hard, firm, very sticky and very plastic; common very fine and fine and few medium roots; many very fine tubular pores; many moderately thick clay films on faces of peds and lining pores; 20 percent pebbles and 30 percent cobbles; slightly alkaline (pH 7.8); clear smooth boundary.

Bt2--7 to 14 inches; reddish brown (5YR 4/3) extremely cobbly clay, dark reddish brown (5YR 3/3) moist; strong medium subangular blocky structure; hard, firm, very sticky and very plastic; common very fine

and fine, and few medium roots; many very fine tubular pores; many moderately thick clay films on faces of peds and lining pores; 25 percent pebbles and 45 percent cobbles; slightly alkaline (pH 7.8); abrupt wavy boundary.

R--14 inches; unweathered quartzite.

Type location: Nye County, Nevada; 4 miles southwest of Johnnie, about 700 feet north and 200 feet west of the southeast corner of section 23, T.18 S., R.52 E.; (36 degrees, 22 minutes, 06 seconds north latitude and 116 degrees, 05 minutes, 12 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during the winter and early spring months and for 10 to 20 days following convection storms.

Soil temperature: 59 to 64 degrees F.

Depth to bedrock: 8 to 14 inches.

Control section:

Clay content--35 to 50 percent.

Rock fragments--Averages 50 to 65 percent, mostly pebbles and cobbles.

A horizon:

Value--6 or 7 dry, 5 or 6 moist.

Chroma--2 through 4 dry or moist.

Effervescence--Strongly effervescent or violently effervescent.

Reaction--Moderately alkaline or strongly alkaline.

Bt horizons:

Hue--5YR or 7.5YR.

Value--4 through 6 dry, 2 through 4 moist.

Chroma--2 through 4 dry or moist.

Texture of fine earth--Clay, sandy clay.

Clay content--40 to 55 percent, weighted average.

Rock fragments--35 to 55 in upper part; 50 to 75 in lower part, mainly cobbles.

Effervescence--Noneffervescent or slightly effervescent.

Reaction--Slightly alkaline or moderately alkaline.

Kawich series

The Kawich series consists of deep and very deep, excessively drained soils that formed in eolian sand derived from mixed rocks. Kawich soils are on dunes. Slopes are 0 to 30 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 54 degrees F.

Taxonomic class: Mixed, mesic Typic Torripsamments

Typical pedon: Kawich fine sand, in map unit 2271.
(Colors are for dry soil unless otherwise noted.)

A--0 to 2 inches; very pale brown (10YR 7/3) fine sand, brown (10YR 5/3) moist; single grain; loose; few very fine and fine roots; many very fine interstitial pores; violently effervescent; strongly alkaline (pH 8.7); clear smooth boundary.

C1--2 to 30 inches; very pale brown (10YR 7/3) fine sand, brown (10YR 5/3) moist; single grain; loose; many very fine and fine and few medium roots; many very fine interstitial pores; violently effervescent; strongly alkaline (pH 8.7); gradual smooth boundary.

C2--30 to 60 inches; very pale brown (10YR 7/3) fine sand, brown (10YR 5/3) moist; single grain; loose; many very fine and fine and few medium roots; many very fine interstitial pores; violently effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Type location: Nye County Nevada; about 12 miles southeast of Scotty's Junction, about 2,100 feet south and 800 feet west of the projected northeast corner section 28, T.9 S., R.45 E.; (37 degrees, 07 minutes, 38 seconds north latitude and 116 degrees, 56 minutes, 04 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, but moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 54 to 60 degrees F.

Depth to unconformable playa: 40 to over 120 inches.

Control section:

Texture--Averages fine sand, but may contain strata of sand or loamy fine sand.

A horizon:

Hue--10YR or 7.5YR.

Value--5 through 8 dry; 4 through 6 moist.

Chroma--2 through 4.

C horizons:

Hue--10YR or 7.5YR.

Value--5 through 8 dry, 4 through 6 moist.

Chroma--2 through 4.

Effervescence--Slightly effervescent to violently effervescent.

Reaction--Slightly alkaline to very strongly alkaline.

Other features--Contains significant amounts of pyroclastic material.

Lastchance series

The Lastchance series consists of moderately deep to a petrocalcic, well drained soils that formed in alluvium mainly from limestone and dolomite. Lastchance soils are on fan remnants and have slopes of 2 to 15 percent. The mean annual precipitation is about 6 inches, and the mean annual air temperature is about 62 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, thermic Calcic Petrocalcids

Typical pedon: Lastchance extremely gravelly loam, located in map unit 1315. (Colors are for dry soil unless otherwise noted.) The surface is covered by approximately 60 percent pebbles, 10 percent cobbles.

A--0 to 2 inches; very pale brown (10YR 7/4) extremely gravelly loam, yellowish brown (10YR 5/4) moist; moderate very thick platy structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine, common fine and medium vesicular pores; few faint clay films on bottoms of peds and lining vesicular pores in the upper inch; 60 percent pebbles, 10 percent cobbles; violently effervescent; strongly alkaline (pH 8.8); clear wavy boundary.

Bk1--2 to 11 inches; very pale brown (10YR 7/4) very gravelly loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; many very fine roots, few fine and medium roots; common very fine and few fine interstitial and tubular pores; few fine soft masses of lime; many (50 percent) patchy thin (< 1 mm) lime coatings on undersides of rock fragments; 40 percent pebbles, 5 percent cobbles; violently effervescent; moderately alkaline (8.4 pH); clear wavy boundary.

Bk2--11 to 20 inches; very pale brown (10YR 7/4) very gravelly loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, firm, slightly sticky and slightly plastic; few very fine roots; few very fine and fine interstitial and tubular pores; common (5 percent) soft masses of lime; many (75 percent) thick (1 to 20 mm) lime coatings on rock fragments; 45 percent pebbles and 5 percent cobbles; violently effervescent; strongly alkaline (pH 8.8); clear wavy boundary.

Bkqm--20 to 60 inches; very pale brown (10YR 8/3) very strongly cemented material, very pale brown (10YR 7/3) and light yellowish brown (10YR 6/4) moist; massive; rigid and very rigid; 40 percent discontinuous strata and lenses of weakly cemented material in the lower part.

Type location: Nye County, Nevada; approximately 3 miles northeast of Pahrump on the road to Horse Springs; about 550 feet south and 100 feet east of the northwest corner of section 8, T.20 S., R.54 E.; (36 degrees, 13 minutes, 59 seconds north latitude and 115 degrees, 56 minutes, 26 seconds west longitude); NAD 1927; Pahrump quadrangle.

Range in characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring. Ratio of actual evapotranspiration between summer and winter is about 0.4, typical of the Mojave Desert. Typic-Aridic soil moisture regime.

Soil temperature: 59 to 66 degrees F.

Depth to petrocalcic horizon: 20 to 30 inches.

Control section:

Percent clay--10 to 18 percent.

Rock fragments--35 to 70 percent, mainly pan fragments.

Calcium carbonate equivalent--Fine earth fraction averages 20 to 50 percent; less than 20 mm fraction averages 40 to 70 percent.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Reaction--Moderately alkaline or strongly alkaline.

Other features--In most pedons, clay films and silt coats commonly occur in the upper part and textures are heavier than underlying horizons due to additions of dust.

Bk horizons:

Value--6 or 7 dry.

Chroma--3 or 4.

Clay content--8 to 18 percent.

Texture--Loam, fine sandy loam, sandy loam.

Rock fragments--35 to 70 percent, mainly pan fragments and limestone or dolomite pebbles.

Other features--Identifiable secondary carbonates are lime coatings on rock fragments and soft masses.

Few thin silica coatings are on rock fragments in some pedons.

Bkqm horizon:

Value--7 or 8 dry.

Structure--Massive or platy.

Pan thickness--Greater than 3 feet thick.

Cementation--Very strongly cemented or indurated, lenses of weakly or moderately cemented material are in the lower part.

Laxal series

The Laxal series consists of very deep, somewhat excessively drained soils that formed in alluvium derived from mixed rocks. Laxal soils are on fan skirts. Slopes are 2 to 8 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 54 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, mesic Durorthidic Torriorthents

Typical pedon: Laxal gravelly sandy loam, in map unit 2532. (Colors are for dry soil unless otherwise noted.)

A--0 to 4 inches; pale brown (10YR 6/3) gravelly sandy loam, brown (10YR 5/3) moist; moderate thin platy structure; soft, very friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine to medium vesicular pores; 30 percent pebbles; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

Bqk1--4 to 14 inches; pale brown (10YR 6/3) very gravelly fine sandy loam, brown (10YR 4/3) moist; massive; soft, very friable, slightly sticky and slightly plastic; common very fine to medium roots; common very fine to medium interstitial pores; 40 percent pebbles; few thin lime and silica pendants on pebbles; strongly effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

Bqk2--14 to 34 inches; pale brown (10YR 6/3) very gravelly sandy loam, brown (10YR 4/3) moist; massive; slightly hard, firm, slightly sticky and slightly plastic; many very fine to medium roots; common very fine and fine interstitial pores; 45 percent pebbles and 5 percent cobbles; common thin lime and silica coats, few thin lime-silica pendants on pebbles, discontinuous lime and silica weakly cemented lenses; strongly effervescent; strongly alkaline (pH 8.8); clear smooth boundary.

Bqk3--34 to 60 inches; pale brown (10YR 6/3) very gravelly sandy loam, brown (10YR 4/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common very fine to medium roots; common very fine and fine interstitial and tubular pores; 35 percent pebbles; few thin lime and silica pendants on pebbles, few lime and silica coatings and filaments in root channels and pores; discontinuous weakly cemented lenses; strongly effervescent; strongly alkaline (pH 8.6).

Type location: Nye County Nevada; about 800 feet east and 2,600 feet south of the projected northwest

corner of section 15, T.5 S. R.43 E.; (37 degrees, 30 minutes, 24 seconds north latitude and 117 degrees, 08 minutes, 46 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, but moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Reaction: Strongly alkaline or very strongly alkaline.

Other features: Buried very gravelly clay loam Bt horizon or gravel layers are below a depth of 40 inches in some pedons.

Effervescence: Strongly effervescent or violently effervescent.

Control section:

Rock fragments--35 to 60 percent, mainly pebbles.

A horizon:

Hue--10YR or 2.5Y.

Value--6 or 7 dry, 3 through 5 moist.

Chroma--2 or 3 dry, 2 through 4 moist.

Bqk horizon:

Hue--10YR or 2.5Y.

Value--6 or 7 dry, 3 through 5 moist.

Chroma--2 or 3 dry, 2 through 4 moist.

Texture--Stratified very gravelly fine sandy loam, sandy loam, coarse sandy loam and loamy coarse sand, commonly with thin strata of sand and clay loam. Averages fine sandy loam, sandy loam or coarse sandy loam after mixing.

Cementation--Discontinuous weak silica bridging rock fragments in some subhorizons above 40 inches.

Other features--Lime and silica coats and pendants common on undersides of rock fragments.

Lealandic series

The Lealandic series consists of moderately deep over a duripan, well drained soils formed in alluvium derived from mixed rocks. Lealandic soils are on fan remnants. Slopes are 2 to 4 percent. Mean annual precipitation is about 7 inches and mean annual temperature is about 63 degrees F.

Taxonomic class: Clayey-skeletal, smectitic, thermic Typic Argidurids

Typical pedon: Lealandic very gravelly sandy loam, in map unit 2191. (Colors are for dry soils unless

otherwise noted.) The soil surface is partially covered with approximately 35 percent pebbles, 5 percent cobbles, and 2 percent stones.

- A--0 to 5 inches; brown (10YR 5/3) very gravelly sandy loam, dark brown (10YR 4/3) moist; moderate very thin and thin platy structure; soft, very friable, slightly sticky and slightly plastic; many very fine, few fine and medium roots; many very fine vesicular and common very fine tubular pores; 40 percent pebbles; slightly effervescent; moderately alkaline (pH 8.4); gradual smooth boundary.
- Bt--5 to 12 inches; dark yellowish brown (10YR 4/6) gravelly sandy clay, dark yellowish brown (10YR 3/6) moist; strong fine and medium subangular blocky structure; hard, firm, sticky and plastic; many fine and medium, and few very fine and coarse roots; many very fine tubular and irregular pores; many pressure faces on peds; 30 percent pebbles; moderately alkaline (pH 8.2); gradual smooth boundary.
- Btk--12 to 23 inches; yellowish brown (10YR 5/6) very gravelly sandy clay, dark yellowish brown (10YR 4/6) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; many very fine tubular and few very fine irregular pores; many very fine roots; common moderately thick pressure faces on peds; few fine soft lime masses and threads; 50 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4), abrupt wavy boundary.
- Bqkm--23 to 40 inches; white (10YR 8/2) indurated duripan, light gray (10YR 7/2) moist; massive; extremely hard, extremely firm silica and lime cemented laminar cap 2 to 15 millimeter thick, violently effervescent.

Type location: Nye County, Nevada; about 1,500 feet north and 2,600 feet west of the projected southeast corner of section 7, T.13 S., R.46, E.; (36 degrees, 49 minutes, 03 seconds north latitude and 116 degrees, 52 minutes, 13 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods of time in the late winter and early spring and for 10 to 20 days from July to October following convection storms.

Soil temperature: 62 to 67 degrees F.

Depth to duripan: 20 to 40 inches.

Control section:

Rock fragments--35 to 60 percent, mainly pebbles.

Clay content--35 to 50 percent.

Reaction--Moderately alkaline or strongly alkaline.

A horizon:

Value--5 or 6 dry, 3 through 5 moist.

Chroma--3 or 4.

Bt horizons:

Hues--10YR, 7.5YR or 5YR.

Value--4 or 5 dry, 3 or 4 moist.

Chroma--4 through 6.

Texture--Very gravelly sandy clay, gravelly sandy clay.

Other features--Some pedons have subhorizons of the lower argillic horizon with textures of very gravelly sandy clay loam or very gravelly loam and accumulation of secondary lime and silica.

Bqkm horizon:

Rupture resistance--Very strongly cemented to indurated.

Leo series

The Leo series consists of very deep, excessively drained soils that formed in alluvium derived from mixed rocks. Leo soils are on inset fans and alluvial fans. Slopes are 2 to 8 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Sandy-skeletal, mixed, mesic Typic Torriorthents

Typical pedon: Leo gravelly sandy loam, in map unit 2690. (Colors are for dry soils unless otherwise noted.)

- A--0 to 4 inches; light brownish gray (10YR 6/2) gravelly sandy loam, brown (10YR 5/3) moist; massive; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine and common fine interstitial pores; 15 percent pebbles; moderately alkaline (pH 8.4); clear smooth boundary.
- C1--4 to 12 inches; light brownish gray (10YR 6/2) gravelly sandy loam, brown (10YR 5/3) moist; massive; soft, very friable, slightly sticky and nonplastic; many very fine and fine roots; many very fine and fine tubular, and many very fine interstitial pores; 15 percent pebbles; slightly effervescent; strongly alkaline (pH 8.6); clear smooth boundary.
- C2--12 to 16 inches; light brownish gray (10YR 6/2) loamy sand with thin strata of sandy loam, grayish brown (10YR 5/2) moist; massive; soft, very friable, nonsticky and nonplastic; many very fine and fine roots; many very fine and common fine interstitial pores; 10 percent pebbles; strongly effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

C3--16 to 21 inches; pale brown (10YR 6/3) very gravelly loamy sand with thin strata of sandy loam, brown (10YR 4/3) moist; single grain; loose, nonsticky and nonplastic; many very fine and fine roots; many very fine and common fine and medium interstitial pores; 35 percent pebbles and 5 percent cobbles; strongly effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

C4--21 to 60 inches; pale brown (10YR 6/3) very gravelly sand, brown (10YR 4/3) moist; single grain; loose, nonsticky and nonplastic; common very fine and fine roots; many very fine, common fine and medium interstitial pores; 50 percent pebbles and 5 percent cobbles; strongly effervescent; strongly alkaline (pH 8.6).

Type location: Nye County, Nevada; approximately 7 miles northeast of Lida Junction, about 600 feet west and 1,400 feet south of the northeast corner of section 15, T.4 S., R.43 E.; (37 degrees, 35 minutes, 51 seconds north latitude and 117 degrees, 08 minutes, 04 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Reaction: Moderately alkaline or strongly alkaline.

Control section:

Clay content--0 to 5 percent.

Rock fragments--35 to 55 percent, dominantly pebbles. Individual strata may range from 10 to 100 percent rock fragments in some pedons.

A horizon:

Value--5 through 7 dry; 4 or 5 moist.

Chroma--2 or 3.

Effervescence--Noneffervescent to slightly effervescent.

C horizons:

Value--5 through 7 dry, 4 or 5 moist.

Chroma--2 or 3.

Texture (less than 2 millimeters)--Stratified. Includes strata of fine sandy loam or sandy loam as well as sand, loamy sand and gravel in some pedons.

Structure--Massive or single grain.

Effervescence--Slightly effervescent to strongly effervescent.

Other features--Strong influence from pyroclastic materials. Some pedons have randomly oriented silica and lime coats on rock fragments.

Lewdlac series

The Lewdlac series consists of shallow over a strongly cemented duripan, well drained soils that formed in alluvium dominantly from quartzite over reworked lacustrine sediments. Lewdlac soils are on alluvial flats. Slopes are 2 to 8 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 61 degrees F.

Taxonomic class: Loamy, mixed, superactive, thermic, shallow Cambidic Haplodurids

Typical pedon: Lewdlac gravelly loamy fine sand, in map unit 2441. (Colors are for dry soil unless otherwise noted.) The soil surface is covered with a thin mantle of windblown sand over a partial desert pavement of pebbles that covers about 60 percent of the soil surface.

A--0 to 3 inches; pale brown (10YR 6/3) gravelly loamy fine sand, yellowish brown (10YR 5/4) moist; weak thick platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots; common very fine interstitial and few very fine tubular pores; 15 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk1--3 to 10 inches; very pale brown (10YR 7/3) fine sandy loam, light yellowish brown (10YR 6/4) moist; moderate medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; few very fine and fine roots; common very fine interstitial and few very fine tubular pores; 10 percent pebbles; few fine lime filaments; violently effervescent; moderately alkaline (pH 8.4); gradual wavy boundary.

Bk2--10 to 16 inches; very pale brown (10YR 7/4) fine sandy loam, yellowish brown (10YR 5/6) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine, few fine and medium roots; common very fine interstitial pores; 10 percent pebbles; many silica and lime pendants on undersides of pebbles; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

Bqkm--16 to 21 inches; white (10YR 8/2) strongly-cemented duripan, very pale brown (10YR 7/4) moist; massive; hard, very firm, brittle; few very fine and fine roots in fractures and between plates; few very fine

and fine interstitial pores; few discontinuous laminar silica lenses and caps on plates; 15 percent pebbles; violently effervescent; clear irregular boundary.

2C1--21 to 29 inches; very pale brown (10YR 8/3 and 10YR 7/4) gravelly sandy clay loam, very pale brown (10YR 7/4) and brownish yellow (10YR 6/6) moist; weak coarse prismatic structure parting to medium coarse subangular blocky; very hard, firm, slightly sticky and slightly plastic; few very fine and fine interstitial and few very fine tubular pores; 15 percent pebbles; strongly effervescent; strongly alkaline (pH 9.0); diffuse irregular boundary.

2C2--29 to 41 inches; very pale brown (10YR 7/4) gravelly clay loam; few fine prominent red (2.5YR 5/6) and reddish yellow (7.5YR 6/6) mottles; weak coarse prismatic structure separating to moderate coarse subangular blocky; very hard, very firm, sticky and plastic; few very fine interstitial and tubular pores; 25 percent pebbles and 5 percent cobbles; strongly effervescent; very strongly alkaline (pH 9.2); diffuse wavy boundary.

2C3--41 to 60 inches; very pale brown (10YR 7/4) extremely gravelly clay loam, light yellowish brown (10YR 6/4) moist; weak medium subangular blocky structure; hard, firm, sticky and plastic; few very fine roots; few very fine interstitial and tubular pores; 50 percent pebbles and 10 percent cobbles; contains small pockets of weakly cemented fine sandy loam; strongly effervescent; very strongly alkaline (pH 9.2).

Type location: Nye County, Nevada; about 500 feet north and 300 feet west of the southeast corner of section 14, T.16 S., R.50 E.; (36 degrees, 33 minutes, 18 seconds north latitude and 116 degrees, 18 minutes, 43 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. The upper part of the moisture control section is moist for a very short time in late winter and for 10 to 20 days following summer convection storms from July through mid October.

Soil temperature: 63 to 69 degrees F.

Depth to duripan: 10 to 20 inches.

Control section:

Clay content--5 to 10 percent.

Rock fragments--5 to 15 percent.

A horizon:

Other features--Mantle of windblown sand is absent in some areas.

Bk horizons:

Chroma--3 or 4 dry, 4 through 6 moist.

Structure--Weak to moderate subangular blocky or horizon is massive.

Texture--Fine sandy loam, sandy loam.

Other features--Some pedons contain small amounts of gypsum. Some pedons contain up to 10 percent pan fragments.

Bqkm horizon:

Rupture resistance--Weakly to strongly cemented

2C horizons:

Texture--Stratified alluvium with variable texture and rock fragments.

Salinity--Slight or moderate.

Lidan series

The Lidan series consists of moderately deep to an indurated duripan well drained soils that formed in alluvium derived from mixed rocks. Lidan soils are on fan remnants. Slopes are 8 to 15 percent. Mean annual precipitation is about 7 inches and mean annual temperature is about 56 degrees F.

Taxonomic class: Clayey-skeletal, smectitic, mesic Abrupt Argidurids

Typical pedon: Lidan gravelly sandy loam, in map unit 2540. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 55 percent pebbles, 5 percent cobbles, and 1 percent stones.

A--0 to 5 inches; light gray (10YR 7/2) gravelly sandy loam, yellowish brown (10YR 5/4) moist; moderate thin platy structure; soft, very friable, slightly sticky and nonplastic; few very fine roots; many fine and medium vesicular pores; 15 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bt--5 to 14 inches; reddish brown (5YR 5/4) very gravelly clay, reddish brown (5YR 4/4) moist; moderate medium subangular blocky structure; hard, firm, very sticky and very plastic; many very fine and few medium roots; common very fine and fine tubular pores; many thick clay films on faces of peds and lining pores; 35 percent pebbles and 15 percent cobbles; slightly alkaline (pH 7.8); clear smooth boundary.

Btqk1--14 to 23 inches; light reddish brown (5YR 6/4) extremely gravelly sandy clay loam, reddish brown (5YR 4/4) moist; weak fine subangular blocky

structure; hard, firm, sticky and plastic; common very fine roots; common very fine and fine tubular pores; common moderately thick clay films on faces of peds and lining pores; common moderately thick silica and lime coatings on undersides of rock fragments; 50 percent pebbles and 10 percent cobbles; slightly effervescent; moderately alkaline (pH 8.0); gradual smooth boundary.

Btqk2--23 to 30 inches; pink (5YR 7/4) extremely gravelly sandy clay loam, light reddish brown (5YR 6/4) moist; weak fine subangular blocky structure; hard, firm, sticky and plastic; few very fine roots; common very fine and fine tubular pores; common moderately thick clay films on faces of peds and lining pores; 50 percent pebbles and 10 percent cobbles; many silica and lime laminar coatings on undersides of rock fragments; strongly effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

Bqkm1--30 to 36 inches; very pale brown (10YR 8/3) indurated silica and lime-cemented duripan, very pale brown (10YR 7/3) moist; massive; extremely firm, violently effervescent; gradual irregular boundary.

Bqkm2--36 to 60 inches; very pale brown (10YR 8/3) strongly silica lime-cemented strata up to 8 inches thick alternating with extremely gravelly loamy sand strata about 3 inches thick, very pale brown (10YR 7/3) moist; many fine interstitial pores; 60 percent pebbles and 5 percent cobbles; rock fragments covered with silica-lime coatings; violently effervescent.

Type location: Nye County, Nevada; east of Lida Junction and near Stonewall Mountain, about 2,000 feet south and 2,400 feet east of the projected northwest corner of section 25, T.5 S., R.43 E.; (37 degrees, 28 minutes, 39 seconds north latitude and 117 degrees, 06 minutes, 16 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during the winter and early spring months and for 10 to 20 days intermittently from July to October following convection storms.

Soil temperature: 54 to 59 degrees F.

Depth to duripan: 20 to 40 inches.

Control section:

Clay content--35 to 50 percent.

Rock fragments--50 to 65 percent, mainly pebbles.

A horizon:

Value--6 or 7 dry, 5 or 6 moist.

Chroma--2 through 4 dry or moist.

Bt and Btqk horizon:

Hue--5YR, 7.5YR, or 10YR.

Value--5 through 7 dry, 4 through 6 moist.

Chroma--2 through 4 dry or moist.

Texture of fine earth--Clay or sandy clay in upper part, clay loam or sandy clay loam in lower part.

Structure--Subangular blocky or prismatic.

Reaction--Slightly alkaline or moderately alkaline.

Bqkm horizon:

Rupture resistance--Indurated or strongly cemented with an indurated subhorizon.

Longjim series

The Longjim series consists of shallow over a duripan, well drained soils that formed in alluvium derived from mixed rocks. Longjim soils are on fan remnants. Slopes are 4 to 15 percent. Mean annual precipitation is about 8 inches and mean annual temperature is about 60 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic, shallow Typic Haplodurids

Typical pedon: Longjim gravelly fine sandy loam, in map unit 2010. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 50 percent pebbles and 5 percent cobbles.

A--0 to 3 inches; light brownish gray (10YR 6/2) gravelly fine sandy loam, dark yellowish brown (10YR 4/4) moist; weak thick platy structure; slightly hard, very friable, slightly sticky and slightly plastic; many fine and common medium vesicular pores; 30 percent pebbles; strongly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bw--3 to 8 inches; light yellowish brown (10YR 6/4) gravelly loam, dark yellowish brown (10YR 4/4) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine, and few medium roots; many very fine interstitial, and few fine tubular pores; 20 percent pebbles; strongly effervescent; strongly alkaline (pH 8.8); clear smooth boundary.

Bk--8 to 16 inches; very pale brown (10YR 7/3) very gravelly sandy loam, light yellowish brown (10YR 6/4) moist; massive; slightly hard, very friable, nonsticky and nonplastic; common very fine and few fine roots; many very fine interstitial and few fine tubular pores;

many lime coats on pebbles; few weakly or strongly silica and lime cemented peds; 50 percent pebbles; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

Bqkm--16 to 45 inches; white (10YR 8/1) strongly and weakly silica-lime cemented hardpan, light gray (10YR 7/2) moist; with a indurated cap 2 to 4 inches thick that is white (10YR 8/2) dry and light yellowish brown (10YR 6/4) moist; few fine and medium roots are between plates; 40 to 60 percent pebbles and cobbles.

Type location: Nye County, Nevada; about 1,500 feet south and 400 feet west of the northeast corner of section 33, T.19 S., R.54 E.; (36 degrees, 15 minutes, 36 seconds north latitude and 115 degrees, 54 minutes, 23 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods of time in the late winter and early spring and for 10 to 20 days from July to October following convection storms.

Soil temperature: 62 to 67 degrees F.

Depth to duripan: 14 to 20 inches.

Control section:

Clay content--5 to 10 percent.

Rock fragments--35 to 70 percent, mainly pebbles, with 0 to 10 percent cobbles.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Bw and Bk horizons:

Hue--10YR or 7.5YR.

Value--6 through 8 dry; 4 through 6 moist.

Chroma--3 or 4.

Texture of fine earth--Fine sandy loam, sandy loam or coarse sandy loam.

Consistence--Soft and slightly hard.

Bqkm horizons:

Value--6 through 8 dry.

Rock fragments--40 to 60 percent mainly pebbles with 0 to 15 percent cobbles.

Rupture resistance--Continuous indurated cap or common continuous silica laminae in upper 6 inches. Commonly layered, with weakly and strongly cemented layers and indurated plates.

Louderback series

The Louderback series consists of very deep, somewhat poorly drained soils that formed in alluvium derived from mixed rocks. Louderback soils are on lake plains. Slopes are 2 to 4 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 54 degrees F.

Taxonomic class: Sandy, mixed, mesic Oxyaquic Torriorthents

Typical pedon: Louderback loamy sand, in map unit 2422. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; very pale brown (10YR 7/3) loamy sand, brown (10YR 5/3) moist; single grain; loose, nonsticky and nonplastic; few fine roots; many fine interstitial and common fine vesicular pores; 10 percent pebbles, slightly effervescent; very strongly alkaline (pH 9.4); abrupt smooth boundary.

C1--3 to 13 inches; pale brown (10YR 6/3) sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and slightly plastic; common fine and medium roots; many very fine and fine interstitial pores; strongly effervescent; very strongly alkaline (pH 9.2); abrupt wavy boundary.

C2--13 to 40 inches; pale brown (10YR 6/3) sand, brown (10YR 5/3) moist; single grain; loose, nonsticky and nonplastic; common fine and medium roots; many very fine and fine interstitial pores; 10 percent pebbles, slightly effervescent; strongly alkaline (pH 9.0); clear smooth boundary.

2C3--40 to 60 inches; light gray (10YR 7/2) very gravelly sand; brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few medium roots; many fine and medium interstitial pores; 40 percent pebbles; slightly effervescent; moderately alkaline (pH 8.4).

Type location: Nye County, Nevada; about 1,848 feet west and 1,452 feet north of the southeast corner of section 22, T.10 S., R.47 E.; (37 degrees, 03 minutes, 01 second north latitude and 116 degrees, 42 minutes, 12 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry but moist for short periods in winter and early spring and for 10 to 20 days between July and October due to convection storms.

Water table: Fluctuates between 36 to 60 inches, March through June.

Soil temperature: 57 to 59 degrees F.

Effervescence: Slightly effervescent or strongly effervescent.

SAR: 13 to 30.

Control section:

Clay content--Averages 2 to 10 percent.

A horizon:

Hue--10YR or 2.5Y.

Value--6 through 8 dry, 4 through 6 moist.

Chroma--2 or 3.

C horizons:

Hue--10YR or 2.5Y

Value--6 through 8 dry, 4 through 6 moist.

Chroma--2 through 4.

Texture--Averages sand or loamy sand.

Structure--Massive or single grain.

Consistence--Soft or slightly hard dry, or loose

Other features--Thin strata of sandy loam, loam or silt loam are present within the control section.

2C horizon:

Value--6 through 8 dry, 4 through 6 moist.

Chroma--2 through 4.

Reaction--Moderately alkaline or strongly alkaline.

Rock fragments--30 to 50 percent mainly pebbles.

Luning series

The Luning series consists of very deep, somewhat excessively drained soils that formed in alluvium derived from mixed rocks. Luning soils are on fan aprons. Slopes are 0 to 2 percent. Mean annual precipitation is about 5 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Sandy, mixed, mesic Typic Torriorthents

Typical pedon: Luning loamy sand, in map unit 2650. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; pale brown (10YR 6/3) loamy sand, brown (10YR 5/3) moist; weak thin platy structure; soft, very friable, nonsticky and nonplastic; many fine interstitial pores; 10 percent pebbles; slightly alkaline (pH 7.8); abrupt smooth boundary.

C1--3 to 6 inches; pale brown (10YR 6/3) gravelly loamy sand, brown (10YR 5/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and fine

roots; common fine interstitial and tubular pores; 20 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

C2--6 to 11 inches; pale brown (10YR 6/3) gravelly loamy sand, brown (10YR 5/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common fine interstitial and tubular pores; 25 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

C3--11 to 22 inches; pale brown (10YR 6/3) gravelly loamy sand, brown (10YR 5/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common fine interstitial and tubular pores; 20 percent pebbles, 5 percent cobbles, and 1 percent stones; strongly effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

C4--22 to 36 inches; pale brown (10YR 6/3) gravelly loamy sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few fine roots; common fine interstitial and tubular pores; 25 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

C5--36 to 60 inches; pale brown (10YR 6/3) stratified very gravelly loamy sand to gravelly coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; many fine interstitial pores; 35 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2).

Type location: Nye County Nevada; about 1 mile northeast of Ralston, about 1,000 feet north and 1,800 feet west of the southeast corner of section 27, T.4 S., R.43 E.; (37 degrees, 33 minutes, 37 seconds north latitude and 117 degrees, 08 minutes, 19 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and spring and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Reaction: Slightly alkaline or strongly alkaline.

Other features: Thin (1/2 to 2 inches) discontinuous strata or lenses of sandy loam occurs in some pedons.

Control section:

Clay content--2 to 8 percent.

Rock fragments--10 to 30 (dominantly 2 to 5 millimeters) with subhorizons containing more than 35 percent rock fragments.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.
 Chroma--2 or 3.

C horizons:

Value--6 or 7 dry, 4 or 5 moist.
 Chroma--2 or 3.
 Texture (less than 2 millimeters)--Loamy sand, sand,
 or coarse sand with thin strata of sandy loam.
 Structure--Massive or subangular blocky.
 Other features--Horizons are stratified.

Migern series

The Migern series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Migern soils are on convex fan remnants. Slopes are 2 to 8 percent. Mean annual precipitation is about 9 inches and mean annual temperature is about 60 degrees F.

Taxonomic class: Fine-loamy over sandy or sandy-skeletal, mixed, superactive, thermic Durinodic Haplargids

Typical pedon: Migern gravelly sandy loam, in map unit 2202. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 65 percent pebbles and 5 percent cobbles.

A--0 to 3 inches; pale brown (10YR 6/3) gravelly sandy loam, yellowish brown (10YR 5/4) moist; moderate thin and medium platy structure; slightly hard, friable, nonsticky and slightly plastic; common very fine and fine roots; few very fine tubular and many fine and medium vesicular pores; 15 percent pebbles; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Bt--3 to 8 inches; brown (10YR 5/3) gravelly clay loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; many very fine and fine, common medium and coarse roots; few very fine and fine tubular, and common medium and coarse interstitial pores; common moderately thick clay films on faces of peds and lining pores; 20 percent pebbles; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Bqk1--8 to 22 inches; very pale brown (10YR 7/3) gravelly loamy sand, dark yellowish brown (10YR 4/4) moist; massive; hard, firm, nonsticky and nonplastic; many very fine and fine, common medium and coarse roots; few very fine and fine tubular pores; common thick lime and silica pendants on

undersides of pebbles; common discontinuous strongly silica and lime cemented horizontal plates, 25 percent pebbles; violently effervescent; moderately alkaline (pH 8.2); clear smooth boundary.
 Bqk2--22 to 65 inches; pale brown (10YR 6/3) gravelly loamy sand, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, nonsticky and nonplastic; few very fine roots; few very fine tubular pores; 25 percent pebbles; common thick lime and silica pendants on undersides of pebbles; common patchy lime coats on sides and tops of pebbles; strongly effervescent; moderately alkaline (pH 8.2).

Type location: Nye County, Nevada; approximately 1.8 miles west of Colson Pond at the north end of Oasis Valley, about 2,400 feet west and 790 feet south of the northeast corner of section 16, T.10 S., R.47 E.; (37 degrees, 04 minutes, 23 seconds north latitude and 116 degrees, 43 minutes, 24 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, but moist in some part of the moisture control section for short periods between December and April, and for a few short intermittent periods 10 to 20 days following summer convection storms.

Soil temperature: 63 to 67 degrees F.

Depth to base of argillic: 5 to 10 inches.

Control section:

Clay content--Averages 20 to 30 percent.

Rock fragments--15 to 30 percent.

A horizon:

Value--5 or 6 dry, 4 or 5 moist.

Bt horizon:

Value--4 or 5 dry or moist.

Chroma--3 or 4 dry or moist.

Texture--Gravelly clay loam or gravelly sandy clay loam.

Clay content--20 to 30 percent.

Rock fragments--15 to 35 percent.

Consistence--Soft or slightly hard dry, very friable or friable moist.

Bqk horizons:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--3 or 4 dry or moist.

Texture--Gravelly loamy sand or gravelly sand.

Clay content--2 to 5 percent.

Rock fragments--20 to 30 percent.

Consistence--Slightly hard or hard dry.

Other features--Commonly some subhorizons have discontinuous horizontal plates strongly cemented by lime and silica. In some pedons a discontinuous laminar cap is present.

Mobl series

The Mobl series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Mobl soils are found on alluvial flats. Slopes are 0 to 2 percent. The mean annual precipitation is about 4 inches and the mean annual temperature is about 65 degrees F.

Taxonomic class: Coarse-loamy, mixed, superactive, thermic Typic Natrargids

Typical pedon: Mobl fine sandy loam, in map unit 2400. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with 35 percent pebbles and 5 percent cobbles.

A--0 to 2 inches; pale brown (10YR 6/3) fine sandy loam, yellowish brown (10YR 5/4) moist; weak fine platy structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; many fine and medium vesicular, few very fine tubular pores; 10 percent pebbles; strongly effervescent; very strongly alkaline (pH 9.6); clear smooth boundary.

Btn--2 to 7 inches; pink (7.5YR 7/4) sandy clay loam, brown (7.5YR 5/4) moist; strong coarse prismatic structure parting to weak fine and medium subangular blocky; slightly hard, friable, sticky and plastic; few very fine roots; few very fine tubular pores; few distinct clay films bridging sand grains; violently effervescent; very strongly alkaline (pH 9.4); gradual smooth boundary.

C1--7 to 17 inches; pink (7.5YR 7/4) sandy loam, pinkish gray (7.5YR 6/2) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; few very fine and fine tubular pores; violently effervescent; very strongly alkaline (pH 9.2); gradual smooth boundary.

2C2--17 to 33 inches; light brownish gray (10YR 6/2) very gravelly sandy loam, brown (10YR 5/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; common very fine and fine interstitial, few very fine tubular pores; 35 percent pebbles; strongly effervescent; strongly alkaline (pH 9.0); gradual wavy boundary.

3C3--33 to 61 inches; light gray (10YR 6/1) extremely gravelly loamy sand; grayish brown (10YR 5/2) moist; single grain; loose, nonsticky and nonplastic; common very fine and fine interstitial pores; 65 percent pebbles; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada; approximately 2.75 miles southwest of Scottys Junction, about 1,200 feet south and 500 feet east of the northwest corner of section 8, T.8 S., R.44 E.; (37 degrees, 15 minutes, 44 seconds north latitude and 117 degrees, 04 minutes, 28 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods of time in the late winter and for short intermittent periods of 10 to 20 days from July to October following convection storms.

Soil temperature: 63 to 67 degrees F.

Depth to lower boundary of natric horizon: 6 to 10 inches.

Reaction: Strongly alkaline or very strongly alkaline.

Control section:

Percent clay--Averages 5 to 18 percent.

Rock fragments--Averages 15 to 35 percent.

A horizon:

Value--6 or 7 dry, 5 or 6 moist.

Chroma--3 or 4 dry or moist.

Btn horizon:

Hue--7.5YR or 10YR.

Value--6 or 7 dry, 5 or 6 moist.

Chroma--2 through 4.

Texture--Sandy clay loam or clay loam.

Clay content--20 to 30 percent.

Rock fragments--Up to 10 percent pebbles.

SAR--31 to 45.

C horizon:

Hue--7.5YR or 10YR.

Value--6 or 7 dry, 5 or 6 moist.

Chroma--2 through 4.

Rock fragments--Up to 10 percent pebbles.

Reaction--Strongly alkaline or very strongly alkaline.

2C and 3C horizon:

Value--6 or 7 dry, 5 or 6 moist.

Chroma--1 though 4 dry or moist.

Texture--Stratified sandy loam to extremely gravelly loamy sand.

Naye series

The Naye series consists of moderately deep, over a lime indurated hardpan, well drained soils that formed in alluvium derived from limestone and dolomite. Naye soils are on fan remnants. Slopes are 2 to 8 percent.

Mean annual precipitation is about 5 inches and mean annual air temperature is about 65 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, thermic Typic Petrocalcids

Typical pedon: Naye gravelly fine sandy loam, in map unit 2341. (Colors are for dry soil unless otherwise noted.)

A--0 to 2 inches; reddish yellow (7.5YR 6/6) gravelly fine sandy loam, brown (7.5YR 4/4) moist; strong thick platy structure; slightly hard, friable, slightly sticky and slightly plastic; common coarse and many very fine, fine and medium roots; few vesicular pores; 15 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bw--2 to 7 inches; light brown (7.5YR 6/4) gravelly fine sandy loam, brown (7.5YR 5/4) moist; weak coarse subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; many very fine and fine and common medium roots; many fine tubular pores; 25 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk1--7 to 18 inches; light brown (7.5YR 6/4) very gravelly fine sandy loam, strong brown (7.5YR 5/6) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine and common medium roots; few very fine tubular pores; 55 percent pebbles; lime is disseminated; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

Bk2--18 to 25 inches; mottled pink (7.5YR 7/4) and pinkish white (7.5YR 8/2) very gravelly fine sandy loam, strong brown (7.5YR 5/6) moist; massive; hard, firm, slightly sticky and slightly plastic; common fine and medium roots; few very fine tubular pores; 40 percent pebbles; lime is disseminated; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

Bkm--25 to 40 inches; pink (7.5YR 8/4) and pink (7.5YR 7/4) indurated lime hardpan; hardpan has a thin laminar upper layer and is stratified; massive; extremely hard, extremely firm; violently effervescent.

Type location: Nye County Nevada; about 700 feet west and 800 feet south of the projected northeast corner of section 15, T.15 S., R.52 E.; (36 degrees, 39 minutes, 10 seconds north latitude and 116 degrees, 07 minutes, 02 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. Moist for short periods in the winter and spring and for 10 to 20 days cumulative from July through mid October following convection storms.

Soil temperature: 64 to 71 degrees F.

Depth to petrocalcic: 20 to 40 inches.

Other features: Desert pavement covers 60 to 90 percent of the soil surface.

Calcium carbonate equivalent: 40 to 60 percent.

Control section:

Clay content--5 to 18 percent.

Rock fragments--35 to 60 percent.

A horizon:

Hue--7.5YR or 10YR.

Value--4 or 5 moist.

Chroma--3 through 6.

Bw horizon:

Hue--7.5YR or 10YR.

Value--4 or 5 moist.

Chroma--2 through 6.

Structure--Fine, medium and coarse subangular blocky structure.

Consistence--Slightly hard or hard, very friable or friable, nonsticky or slightly sticky, nonplastic or slightly plastic.

Reaction--Moderately alkaline or strongly alkaline.

Bk horizon:

Hue--10YR or 7.5YR.

Value--6 through 8 dry, 4 or 5 moist.

Chroma--2 through 6.

Structure--Weak fine and medium subangular blocky or massive.

Bkm horizon:

Hue--10YR or 7.5YR.

Value--6 through 8 dry, 4 through 8 moist.

Chroma--1 through 4

Other features--The Bkm horizon ranges from 4 to 24 inches in thickness.

Rupture resistance--Very strongly cemented or indurated.

Niavi series

The Niavi series consists of very deep, somewhat excessively drained soils that formed in alluvium from quartzite with minor amounts of limestone, dolomite, shale and sandstone. Niavi soils are on stream terraces

and inset fans. Slopes range from 2 to 8 percent. The mean annual precipitation is about 7 inches and the mean annual air temperature is about 61 degrees F.

Taxonomic class: Sandy-skeletal, mixed, thermic Typic Haplocalcids

Typical pedon: Niavi extremely cobbly fine sandy loam located in map unit 2810. (Colors are for dry soil unless otherwise noted.) The surface is covered by approximately 40 percent gravel, 40 percent cobbles, and 2 percent stones.

A--0 to 2 inches; pale brown (10YR 6/3) extremely cobbly fine sandy loam, brown (10YR 4/3) moist; weak thick platy structure parting to weak fine subangular blocky; soft, very friable, nonsticky and nonplastic; many very fine roots; many very fine vesicular and few very fine interstitial and tubular pores; 45 percent gravel, 40 percent cobbles and 1 percent stones; slightly effervescent (1 percent calcium carbonate equivalent); moderately alkaline (pH 8.2); abrupt wavy boundary.

Bw--2 to 8 inches; pale brown (10YR 6/3) extremely gravelly coarse sandy loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine interstitial and tubular pores; 65 percent gravel and 10 percent cobbles; strongly effervescent (1 percent calcium carbonate equivalent); moderately alkaline (pH 8.4); clear wavy boundary.

Bk1--8 to 14 inches; pale brown (10YR 6/3) extremely gravelly sandy loam, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine, few fine and medium roots; many very fine interstitial and common very fine and fine tubular pores; 30 percent thin (< 0.2mm) patchy, calcium carbonate coats on bottoms of rock fragments; 60 percent gravel and 15 percent cobbles; violently effervescent (3 percent calcium carbonate equivalent); moderately alkaline (pH 8.4); clear wavy boundary.

Bk2--14 to 29 inches; pale brown (10YR 6/3) stratified extremely gravelly coarse sandy loam to extremely gravelly coarse sand (averages extremely gravelly loamy coarse sand), brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine, few fine and medium roots; many very fine interstitial and common very fine and fine tubular pores; 40 percent thin (< 0.2mm), patchy, calcium carbonate coats on bottoms of rock fragments; 5 percent thin lenses of fine gravel; 80 percent gravel and 5 percent cobbles; violently

effervescent (4 percent calcium carbonate equivalent); moderately alkaline (pH 8.4); clear wavy boundary.

Bk3--29 to 35 inches; pale brown (10YR 6/3) stratified extremely gravelly coarse sandy loam to extremely gravelly coarse sand (averages extremely gravelly coarse sandy loam), brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine through medium roots, few coarse roots; many very fine and fine interstitial and few very fine and fine tubular pores; 3 percent fine and medium soft masses of calcium carbonate; 80 percent thin (< 0.5mm) calcium carbonate coats on bottoms of rock fragments and 20 percent on sides and tops of rock fragments; 70 percent gravel and 10 percent cobbles; violently effervescent (6 percent calcium carbonate equivalent); moderately alkaline (pH 8.4); clear wavy boundary.

Bk4--35 to 60 inches; light brown (7.5YR 6/4) stratified extremely gravelly coarse sandy loam to extremely gravelly coarse sand (averages extremely gravelly loamy coarse sand), brown (7.5YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and few fine roots; many very fine interstitial pores; 20 percent thin (< 0.5mm), patchy, calcium carbonate coats on bottoms of rock fragments; 60 percent gravel and 15 percent cobbles; violently effervescent (5 percent calcium carbonate equivalent); moderately alkaline (pH 8.4).

Type location: Nye County, Nevada; about 3 miles east of Crystal; approximately 300 feet north and 600 feet west of the southeast corner of section 12, T.17 S., R.52 E.; (36 degrees, 28 minutes, 55.28 seconds north latitude and 116 degrees, 04 minutes, 12.48 seconds west longitude); NAD 1927; USGS Mt. Schader quadrangle.

Range in Characteristics:

Soil moisture: usually dry, moist in some part for short periods during winter and early spring. The ratio of summer to winter actual evapotranspiration is about 0.4, typical of the Mojave Desert. The soils have a Typic-Aridic moisture regime.

Soil temperature: 59 to 64 degrees F.

Depth to Bk horizon: 6 to 9 inches.

Reaction: Moderately alkaline.

Control section:

Rock fragments--Average 60 to 85 percent, mainly quartzite gravel, with up to 20 percent quartzite cobbles and up to 5 percent stones.

Clay content--3 to 8 percent.

Texture--Stratified, averages loamy sand, loamy coarse sand or coarse sand in the less than 2 millimeter fraction.

A horizon:

Value--5 or 6 dry, 2 or 3 moist.

Chroma--2 or 3.

Structure--Platy or subangular blocky.

Effervescence--Very slightly effervescent or slightly effervescent.

Bw horizon:

Value--5 through 7 dry.

Texture--Coarse sandy loam, sandy loam, fine sandy loam.

Rock fragments--40 to 75 percent, mainly quartzite gravel.

Effervescence--Very slightly effervescent through strongly effervescent.

Calcium carbonate equivalent--1 to 3 percent.

Bk horizons:

Hue--10YR or 7.5YR.

Value--6 or 7 dry.

Chroma--3 or 4.

Texture--Stratified, averages coarse sand, loamy sand or loamy coarse sand; individual strata range from very gravelly sandy loam to extremely gravelly coarse sand, and includes strata of gravel in some pedons.

Rock fragments--60 to 85 percent, mainly quartzite gravel.

Structure--Single grain or massive; some pedons have thin layers with weak subangular blocky structure in the upper part.

Consistence--Loose or soft, dry; loose or very friable, moist.

Calcium carbonate equivalent--3 to 12 percent; subhorizons more than 15 cm thick have 5 percent or more.

Identifiable secondary carbonates--Fine and medium soft masses and patchy or continuous coatings up to 1 millimeter thick on rock fragments. Volume as seen on the vertical face of the horizon ranges from 1 to 10 percent, with subhorizons more than 15 cm thick having volume of 5 percent or more.

Nickel series

The Nickel series consists of deep and very deep, well drained soils that formed in alluvium derived from

mixed rocks. Nickel soils are on fan remnants. Slopes are 2 to 15 percent. Mean annual precipitation is about 5 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic Typic Haplocalcids

Typical pedon: Nickel gravelly loam, in map unit 2058. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 40 percent pebbles.

A--0 to 3 inches; pale brown (10YR 6/3) gravelly loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine roots; many very fine interstitial pores; 30 percent pebbles; violently effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

Bw1--3 to 7 inches; light brown (7.5YR 6/3) very gravelly sandy loam, brown (7.5YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots, many very fine interstitial pores; 35 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

Bw2--7 to 11 inches; light brown (7.5YR 6/3) extremely gravelly sandy loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine, and few fine roots; many very fine interstitial pores; 85 percent pebbles; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

Bk1--11 to 19 inches; white (10YR 8/2) extremely gravelly sandy loam, light gray (10YR 7/2) moist; massive; hard, friable, nonsticky and nonplastic; few very fine and fine roots; many very fine and few fine interstitial pores; weakly lime-cemented lenses 1 and 2 inches thick; 80 percent lime-coated pebbles; violently effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

Bk2--19 to 60 inches; light brownish gray (10YR 6/2) extremely gravelly sandy loam, brown (10YR 5/3) moist; massive; hard, friable, nonsticky and nonplastic; few very fine and fine roots; many very fine and common fine interstitial pores; 80 percent pebbles, few lime coats on undersides of pebbles; few thin (1 to 3-inch thick) weakly lime-cemented strata that are very hard and firm; violently effervescent; moderately alkaline (pH 8.2)

Type location: Nye County Nevada; about 2,300 feet north and 4,500 feet west of the southeast corner of

section 22, T.16 S., R.52 E.; (36 degrees, 32, minutes, 38 seconds north latitude and 116 degrees, 07 minutes, 24 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. Moist for short periods throughout the moisture control section December through March. Moist above and periodically in upper part of moisture control section 10 to 20 days cumulative, July through October due to convection storms.

Soil temperature: 59 to 71 degrees F.

Depth to calcic horizon: 10 to 25 inches.

Depth to bedrock: 40 to more than 60 inches.

Other features: Small amounts of gypsum in the lower profile of some pedons.

Reaction: Moderately alkaline or strongly alkaline.

Control section:

Clay content--Averages 3 to 18 percent, commonly less than 15.

Rock fragments--50 to 85 percent, mainly pebbles.

A horizon:

Hue--10YR or 7.5YR.

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Bw horizon:

Hue--10YR or 7.5YR.

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 or 3.

Texture of fine earth--Sandy loam or loam with less than 18 percent clay.

Structure--Weak or moderate subangular blocky or prismatic.

Rock fragments--10 to 85 percent rock fragments in any one subhorizon.

Bk horizons:

Hue--10YR or 7.5YR.

Value--5 through 8 dry, 4 through 7.

Chroma--1 through 4.

Calcium carbonate equivalent--15 to 25 percent in some subhorizons within a depth of 40 inches.

Other features--Weak lime cementation in some lenses or subhorizons.

Nopah series

The Nopah series consists of very deep, well-drained soils that formed in alluvium derived from mixed rocks.

Nopah soils are on inset fans. Slopes are 0 to 8 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Fine-silty, carbonatic, thermic Typic Torriorthents

Typical pedon: Nopah loam, in map unit 3333. (Colors are for dry soil unless otherwise noted.)

A--0 to 2 inches; light gray (10YR 7/2) loam, brown (10YR 5/3) moist; moderate medium platy structure; soft, very friable, slightly sticky and slightly plastic; few fine roots; few fine vesicular and tubular pores; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

C1--2 to 6 inches; light gray (10YR 7/2) loam, yellowish brown (10YR 5/4) moist; weak coarse prismatic structure parting to strong thin platy; slightly hard, very friable, slightly sticky and slightly plastic; few fine roots; few fine tubular pores; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

C2--6 to 9 inches; light gray (10YR 7/2) silt loam, yellowish brown (10YR 5/4) moist; weak medium prismatic structure, parting to strong thin platy; slightly hard, friable, sticky and plastic; common fine roots; common fine and few medium tubular pores; violently effervescent; strongly alkaline (pH 8.8); abrupt wavy boundary.

C3--9 to 18 inches; very pale brown (10YR 7/3) silt loam, yellowish brown (10YR 5/4) moist; weak coarse prismatic structure parting to strong thick and thin platy; slightly hard, friable, sticky and plastic; common fine and few medium roots; few fine tubular pores; violently effervescent, strongly alkaline (pH 9.0); abrupt wavy boundary.

C4--18 to 30 inches; very pale brown (10YR 7/3) silty clay loam, yellowish brown (10YR 5/4) moist; weak coarse prismatic structure; slightly hard, friable, very sticky and plastic; few very fine and fine roots; few fine tubular pores; violently effervescent; very strongly alkaline (pH 9.4); clear smooth boundary.

C5--30 to 46 inches; very pale brown (10YR 7/3) silty clay loam, yellowish brown (10YR 5/4) moist; weak coarse prismatic structure; slightly hard, friable, very sticky and plastic; few very fine and fine roots; few fine tubular pores; violently effervescent; very strongly alkaline (pH 9.2); clear smooth boundary.

C6--46 to 60 inches; very pale brown (10YR 7/3) silty clay loam, yellowish brown (10YR 5/4) moist; weak coarse prismatic structure; slightly hard, friable, very sticky and plastic; few fine roots; few fine tubular pores; violently effervescent; very strongly alkaline (pH 9.2).

Type location: Nye County, Nevada; near the junction of Gamebird and Homestead roads in Pahrump Valley about 50 feet south and 150 feet east of the northwest corner of section 6, T.21 S., R.54. E.; (36 degrees, 09 minutes, 39 seconds north latitude and 115 degrees, 57 minutes, 26 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. The upper part of the moisture control section is moist for a very short time in late winter and for 10 to 20 days following summer convection storm from July through mid October.

Soil temperature: 59 to 65 degrees F.

Calcium carbonate equivalent: 40 to 65 percent.

Effervescence: Slightly effervescent to violently effervescent.

Other features: A few weakly cemented cylindrical lime nodules are present in the upper 40 inches of some pedons.

Control section:

Clay content--20 to 35 percent.

A horizon:

Value--6 or 7 dry.

Chroma--2 or 3 dry, 3 or 4 moist.

Reaction--Moderately alkaline to very strongly alkaline.

C horizons:

Hue--Dominantly 10YR with some strata of 5Y common in some pedons.

Value--6 or 7 dry; 3 through 5.

Chroma--2 through 4.

Structure--Prismatic or platy; some horizons are massive.

Texture--Stratified loam, silt loam, clay loam, silty clay, loam and clay.

Consistence--Soft to hard, very friable to firm, slightly sticky to very sticky, slightly plastic or plastic.

Reaction--Strongly alkaline or very strongly alkaline.

Nowoy series

The Nowoy series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks over lacustrine sediments. Nowoy soils are on alluvial flats. Slopes are 2 to 8 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 64 degrees F.

Taxonomic class: Fine-loamy, carbonatic, thermic Typic Haplocalcids

Typical pedon: Nowoy gravelly loamy fine sand, in map unit 2161. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 45 percent pebbles.

A--0 to 3 inches; light yellowish brown (10YR 6/4) gravelly loamy fine sand, yellowish brown (10YR 5/4) moist; moderate medium platy structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine interstitial pores; 15 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk1--3 to 10 inches; light yellowish brown (10YR 6/4) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine, fine and medium roots; common very fine and fine interstitial pores; few very fine lime filaments; 50 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk2--10 to 20 inches; light yellowish brown (10YR 6/4) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and common fine roots; common very fine and fine interstitial pores; 50 percent pebbles; common fine soft lime masses; violently effervescent; moderately alkaline (pH 8.4) abrupt wavy boundary.

2Bk3--20 to 36 inches; white (10YR 8/1) clay loam, very pale brown (10YR 8/3) moist; massive; very hard, friable, sticky and plastic; common very fine, fine and medium roots; few very fine interstitial pores; many thin discontinuous weakly lime-cemented plates; violently effervescent, moderately alkaline (pH 8.4); gradual irregular boundary.

2Bk4--36 to 51 inches; light yellowish brown (10YR 6/4) clay loam; yellowish brown (10YR 5/4) moist; massive; hard, friable, sticky and plastic; common fine roots; few very fine interstitial pores; 20 percent lime concretions; violently effervescent; strongly alkaline (pH 8.8); clear wavy boundary.

2Bk5--51 to 60 inches; white (10YR 8/1) clay loam; very pale brown (10YR 8/3) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine interstitial pores; common discontinuous weakly lime-cemented masses; violently effervescent; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada; approximately 11 miles southwest of the junction of U.S. 95 and State

Route 160, about 1,400 feet north and 2,600 feet east of the southwest corner of section 20, T.17 S., R.51 E.; (36 degrees, 27 minutes, 24 seconds north latitude and 116 degrees, 15 minutes, 29 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. The upper part of the moisture control section is moist for short periods in winter and early spring for 10 to 20 days, July through mid October following convection storms.

Soil temperature: 63 to 67 degrees F.

Depth to calcic horizon: 10 to 25 inches.

Calcium carbonate equivalent: 40 to 60 percent.

Control section:

Clay content--5 to 10 percent in upper part, 27 to 35 in lower part, (18 to 27 percent when mixed).

Rock fragments--35 to 50 percent in the upper part, 0 to 8 percent in lower part, (15 to 30 percent mixed).

A horizon:

Value--5 through 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Bk horizons:

Value--5 through 7 dry; 4 through 6 moist.

Chroma--2 through 4.

Clay content--5 to 10 percent.

Rock fragments--35 to 50 average.

2Bk horizons:

Hue--10YR, 2.5Y or 5Y.

Value--6 through 8 dry, 5 through 8 moist.

Chroma--1 through 4.

Texture--Clay loam or silty clay loam.

Clay content--27 to 35 percent.

Cementation--Weak lime cementation of peds, plates, or masses in some subhorizons.

Other features--Thin stratification in most profiles.

Orwash series

The Orwash series consists of very deep, somewhat excessively drained soils that formed from alluvium derived from granitic rocks. Orwash soils are on fan skirts. Slopes are 0 to 15 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 58 degrees F.

Taxonomic class: Sandy, mixed, thermic Typic Torriorthents

Typical pedon: Orwash gravelly sandy loam, in map unit 2425. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 40 percent pebbles and 5 percent cobbles.

A1--0 to 3 inches; very pale brown (10YR 7/3) gravelly sandy loam, brown (10YR 5/3) moist; weak medium platy structure; soft, very friable, slightly sticky and nonplastic; few very fine roots; common very fine and fine vesicular pores; 25 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

A2--3 to 8 inches; pale brown (10YR 6/3) gravelly loamy coarse sand, brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, friable, nonsticky and nonplastic; few very fine and fine roots; few very fine and fine vesicular and interstitial pores; 20 percent pebbles, 5 percent cobbles; violently effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

C1--8 to 18 inches; very pale brown (10YR 7/3) gravelly loamy coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; many very fine and fine interstitial pores; 20 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

C2--18 to 29 inches; very pale brown (10YR 7/3) very gravelly loamy coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine and fine roots; many very fine and fine interstitial pores; 40 percent pebbles; slightly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

C3--29 to 60 inches; very pale brown (10YR 7/3) gravelly loamy coarse sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine and fine interstitial pores; 30 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4).

Type location: Nye County, Nevada; approximately 1.5 miles north of Bonnie Clair Lakebed, about 2,400 feet south and 100 feet west of the projected northeast corner of section 33, T.8 S., R.43 E.; (37 degrees, 12 minutes, 02 seconds north latitude and 117 degrees, 08 minutes, 56 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, but moist in some part for short periods during winter and early spring months,

and for 10 to 20 days cumulative between July to October due to convection storms.

Soil temperature: 59 to 63 degrees F.

Reaction: Moderately alkaline or strongly alkaline.

Effervescence: Slightly effervescent to violently effervescent.

Control section:

Rock fragments--15 to 35 percent gravel, predominantly 2 to 5 millimeters in diameter.

A horizons:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 or 3.

C horizons:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Texture (less than 2 millimeters)--Dominantly loamy coarse sand, but thin subhorizons of coarse sandy loam may exist in some pedons.

Rock fragments--Averages 15 to 35 percent, but most pedons contain horizons which have 35 to 60 percent rock fragments.

Pahrump series

The Pahrump series consists of very deep, well drained soils that formed in lacustrine sediments derived from volcanic rocks. Pahrump soils are on spits. Slopes are 4 to 15 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 64 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, thermic Petronodic Haplocalcids

Typical pedon: Pahrump fine sandy loam, located in map unit 2110. (Colors are for dry soils unless otherwise noted.) The soil surface is partially covered with approximately 30 percent pebbles.

A--0 to 2 inches; light gray (10YR 7/2) fine sandy loam, pale brown (10YR 6/3) moist; weak thick platy structure; soft, very friable, nonsticky and nonplastic; few very fine vesicular and many very fine interstitial pores; 10 percent pebbles; violently effervescent; strongly alkaline (pH 8.8); abrupt smooth boundary.

Bk1--2 to 8 inches; white (10YR 8/2) very fine sandy loam, pale brown (10YR 6/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; few very fine and fine roots; common very fine and fine interstitial pores; few hard lime concretions; violently

effervescent; strongly alkaline (pH 9.0); abrupt wavy boundary.

Bk2--8 to 16 inches; white (10YR 8/2) loam, pale brown (10YR 6/3) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine and medium roots; few fine tubular and common fine interstitial pores; 10 percent hard, contorted and generally cylindrical lime concretions; violently effervescent; very strongly alkaline (pH 9.2); abrupt wavy boundary.

2Bk3--16 to 22 inches; light gray (10YR 7/2) very gravelly silt loam, light yellowish brown (10YR 6/4) moist; massive; hard, very friable, sticky and slightly plastic; few very fine roots; many very fine tubular pores; 50 percent hard, contorted, branched and generally cylindrical lime concretions; violently effervescent; very strongly alkaline (pH 9.2); abrupt irregular boundary.

2Bk4--22 to 32 inches; white (10YR 8/3) very gravelly silty clay loam, light yellowish brown (10YR 6/4) moist; massive; hard, friable, sticky and plastic; common very fine and fine tubular pores; 55 percent hard, contorted, branched and generally cylindrical lime concretions; violently effervescent; very strongly alkaline (pH 9.4); abrupt irregular boundary.

2Bk5--32 to 42 inches; white (10YR 8/2) very gravelly silt loam, light yellowish brown (10YR 6/4) moist; massive; hard, very friable, sticky and slightly plastic; common very fine and fine tubular pores; 50 percent hard, contorted, branched lime concretions; violently effervescent; very strongly alkaline; (pH 9.2) abrupt smooth boundary.

3C--42 to 60 inches; white (10YR 8/2) very fine sandy loam, pale brown (10YR 6/3) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; few very fine tubular and common very fine interstitial pores; violently effervescent; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada; about 660 feet east and 50 feet north of the southwest corner of section 35, T.19 S., R.53 E.; (36 degrees, 14 minutes, 58 seconds north latitude and 115 degrees, 59 minutes, 35 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in winter and early spring for 10 to 20 days July through mid October following convection storms.

Soil temperature: 65 to 70 degrees F.

Reaction: Strongly alkaline or very strongly alkaline.

Calcium carbonate equivalent: 40 to 60 percent.

Control section:

Percent clay--18 to 25 percent.

Percent sand--Less than 15 percent fine through coarse sand in the fine earth fraction.

Other features--Average 50 to 60 percent by volume contorted, branched, and cylindrical hard lime concretion and nodules.

Panor series

The Panor series consists of very deep, moderately well drained soils that formed in lacustrine sediments derived from volcanic rocks. Panor soils are on alluvial flats. Slopes are 2 to 4 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 64 degrees F.

Taxonomic class: Fine-loamy, mixed, superactive, calcareous, thermic Typic Torriorthents

Typical pedon: Panor clay loam, in map unit 2162. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 5 percent pebbles.

A--0 to 1 inch; white (10YR 8/1) clay loam, white (10YR 8/2) moist; strong medium platy structure; slightly hard, very friable, sticky and slightly plastic; common very fine and fine vesicular pores; 5 percent pebbles; strongly effervescent; strongly alkaline (pH 8.8); abrupt wavy boundary.

Bk--1 to 5 inches; white (10YR 8/1) silt loam, white (10YR 8/2) moist; weak fine subangular blocky structure; slightly hard, very friable, sticky and slightly plastic; common very fine and fine interstitial pores; few fine soft lime masses; violently effervescent; strongly alkaline (pH 8.8); abrupt wavy boundary.

Bky--5 to 23 inches; white (10YR 8/1) clay loam with few patches of pinkish gray (5YR 6/2), white (10YR 8/2) and light reddish brown (5YR 6/4) moist; moderate medium subangular blocky structure; slightly hard, very friable, sticky and plastic; common very fine and fine interstitial pores; few fine soft threads, patches and filaments of gypsum and lime; violently effervescent, strongly alkaline (pH 8.8) clear wavy boundary.

2Bk1--23 to 31 inches; white (10YR 8/1) gravelly clay loam, white (10YR 8/2) moist; weak medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine interstitial pores; 30 percent pebbles; common fine soft lime masses; violently effervescent; strongly alkaline (pH 8.5); gradual wavy boundary.

2Bk2--31 to 60 inches; white (10YR 8/1) gravelly clay loam, with few patches of pinkish gray (5YR 7/2) white (10YR 8/2) and pink (5YR 7/3) moist; weak medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine and fine interstitial pores; 30 percent pebbles; few fine soft lime masses; violently effervescent; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada; approximately 6 miles southwest of the junction of U.S. 95 and State Route 160, about 1,400 feet north and 1,000 feet west of the southeast corner of section 22, T.16 S., R.51 E.; (36 degrees, 32 minutes, 33 seconds north latitude and 116 degrees, 13 minutes, 10 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods during winter and spring and for 10 to 20 days July through mid October following convection storms.

Soil temperature: 62 to 67 degrees.

Calcium carbonate equivalent: 15 to 40 percent.

Reaction: Strongly alkaline or very strongly alkaline.

Control section:

Clay content--27 to 35 percent.

Rock fragments--Up to 30 percent by average.

Calcium carbonate equivalent--5 to 10 percent.

A horizon:

Chroma--1 through 3 dry, 2 through 4 moist.

Bk and Bky horizon:

Value--6 through 8, dry or moist.

Chroma--1 through 3 moist.

Texture--Silt loam or clay loam.

Gypsum--Few soft threads or patches, 2 to 10 millimeters in size, in some subhorizons of some pedons.

Consistence--Slightly hard dry, very friable moist and slightly plastic or plastic moist.

2Bk horizon:

Value--6 through 8 dry or moist.

Chroma--1 through 3 moist.

Texture--Clay loam and gravelly clay loam, with minor strata of silt loam in some pedons.

Rock fragments--0 to 35 percent.

Consistence--Very friable or friable, plastic or slightly plastic.

Effervescence--Strongly effervescent or violently effervescent.

Papoose series

The Papoose series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Papoose soils are on fan remnants. Slopes are 2 to 8 percent. Mean annual precipitation is about 7 inches and mean annual air temperature is about 53 degrees F.

Taxonomic class: Fine-loamy, mixed, superactive, mesic Typic Haplargids

Typical pedon: Papoose gravelly loamy sand, in map unit 2710. (Colors are for dry soil unless otherwise noted.)

A1--0 to 3 inches; pale brown (10YR 6/3) gravelly loamy sand, brown (10YR 4/3) moist; moderate medium platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine interstitial pores; 20 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

A2--3 to 6 inches; pale brown (10YR 6/3) gravelly sandy loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine and fine interstitial pores; 25 percent pebbles; slightly effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

Bt--6 to 12 inches; light yellowish brown (10YR 6/4) gravelly sandy clay loam, yellowish brown (10YR 5/4) moist; moderate coarse prismatic structure parting to moderate medium subangular blocky; hard, friable, slightly sticky and slightly plastic; common very fine, fine and medium roots; many very fine and fine tubular pores; 15 percent pebbles; common moderately thick clay films on faces of peds and lining pores; slightly effervescent; slightly alkaline (pH 7.8); clear wavy boundary.

Btk--12 to 25 inches; pale brown (10YR 6/3) very gravelly loam, yellowish brown (10YR 5/4) moist; moderate medium and coarse subangular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine, fine and medium, and few coarse roots; many very fine, fine and medium tubular pores; 35 percent pebbles; few thin clay films lining pores; common fine lime filaments in pores; violently effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

2C--25 to 60 inches; light yellowish brown (10YR 6/4) extremely gravelly loamy sand, brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; many very fine through medium interstitial pores; 60

percent pebbles; few fine lime pendants on rock fragments; violently effervescent; strongly alkaline (pH 9.0)

Type location: Nye County, Nevada; approximately 4 miles east of Goldfield, about 1,700 feet east and 1,300 feet north of the southwest corner of section 28, T.2 S., R.43 E.; (37 degrees, 43 minutes, 56 seconds north latitude and 117 degrees, 09 minutes, 47 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, most in some part for short periods during winter and early spring months, and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 55 to 56 degrees F.

Effervescence: Slightly effervescent to violently effervescent.

Reaction: Moderately alkaline or strongly alkaline.

Depth to base of Bt horizon: 10 to 20 inches.

A horizons:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Bt and Btk horizons:

Hue--7.5YR or 10YR.

Value--5 through 7 dry, 3 through 6 moist.

Chroma--2 through 4.

Texture--Sandy clay loam, clay loam, sandy loam or gravelly sandy clay loam, fine sandy loam, very gravelly loam, gravelly loam.

Clay content--18 to 27 percent (mixed)

Rock fragments--0 to 35 percent.

Structure--Prismatic, subangular blocky or massive.

Consistence--Friable or very friable moist.

Bk horizon:

Hue--7.5YR or 10YR.

Value--6 or 7 dry, 4 through 6 moist.

Chroma--2 through 4.

Structure--Subangular blocky, granular or massive.

Consistence--Soft or slightly hard dry.

2C horizon:

Hue--7.5YR or 10YR.

Value--6 or 7 dry, 4 through 6 moist.

Chroma--2 through 4.

Texture--Loamy sand or coarse sand

Rock fragments--15 to 60 percent, some subhorizon within 40 inches have 35 to 60 percent rock fragments.

Structure--Massive or single grain.
 Consistence--Soft or slightly hard dry or loose.

Pinez series

The Pinez series consists of deep over a duripan, well drained soils that formed in alluvium derived from mixed rocks. Pinez soils are on fan remnants. Slopes are 2 to 4 percent. Mean annual precipitation is about 5 inches and mean annual temperature is about 64 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic Durinodic Haplargids

Typical pedon: Pinez very gravelly loamy sand, in map unit 2191. (Colors are for dry soil unless otherwise noted). The soil surface is partially covered with approximately 65 percent pebbles, 10 percent cobbles, and 5 percent stones.

A--0 to 4 inches; pale brown (10YR 6/3) very gravelly loamy sand, dark yellowish brown (10YR 4/4) moist; moderate very thin and thin platy structure; soft, very friable, nonsticky and slightly plastic; few very fine and fine roots; many very fine vesicular and few very fine tubular pores; 45 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); gradual wavy boundary.

BA--4 to 10 inches; pale brown (10YR 6/3) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; moderate very fine and fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine, fine and medium, common coarse roots; common very fine interstitial and few very fine tubular pores; 50 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); gradual wavy boundary.

Btk--10 to 29 inches; yellowish brown (10YR 5/4) very gravelly sandy clay loam, dark yellowish brown (10YR 4/6) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; common very fine and fine roots; many very fine interstitial and few very fine tubular pores; common thin clay films on pebbles; 55 percent pebbles; thin lime coats and pendants on undersides of pebbles, strongly effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

2Bqk--29 to 41 inches; pale brown (10YR 6/3) extremely gravelly loamy sand, dark yellowish brown (10YR 4/4) moist; single grain; loose, nonsticky and nonplastic; many very fine and fine interstitial pores; 85 percent pebbles; 75 percent strongly silica-lime

cemented discontinuous plates and masses; strongly effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

2Bqkm--41 inches; very pale brown (10YR 7/3) indurated duripan with laminar cap; many medium and coarse distinct white (10YR 8/2) lime coatings, light brownish gray (10YR 6/2) moist; massive; very hard, very firm, brittle; common very fine and fine interstitial and few fine tubular pores; 85 percent pebbles; violently effervescent.

Type location: Nye County, Nevada; about 2,800 feet west and 2,100 feet north of the projected southeast corner, section 7, T.13 S., R.46 E.; (36 degrees, 49 minutes, 09 seconds north latitude and 116 degrees, 52 minutes, 15 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods of time during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 65 to 70 degrees F.

Depth to duripan: 40 to 60 inches.

Reaction: Moderately alkaline or strongly alkaline.

Control section:

Clay content--18 to 35 percent.

Rock fragments--35 to 70 percent, mainly pebbles.

A horizon:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--2 through 4.

Btk horizon:

Hue--10YR or 7.5YR.

Value--5 or 6 dry, 4 or 5 moist.

Chroma--3 through 6.

Texture--Very gravelly sandy loam, very gravelly sandy clay loam, very gravelly clay loam.

2Bqk horizon:

Hue--10YR or 7.5YR.

Value--6 or 7 dry, 4 through 7 moist.

Chroma--3 or 4.

2Bqkm horizon:

Rupture resistance--Very strongly cemented to indurated.

Pintwater series

The Pintwater series consists of shallow, well drained soils that formed in residuum and colluvium derived from volcanic rocks. Pintwater soils are on hills. Slopes are 15

to 75 percent. Mean annual precipitation is about 7 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, mesic Lithic Torriorthents

Typical pedon: Pintwater very gravelly fine sandy loam, in map unit 2251. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; pale brown (10YR 6/3) very gravelly fine sandy loam, brown (10YR 4/3) moist; weak medium and coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; few fine and very fine roots; many fine and medium vesicular pores; 30 percent pebbles and 20 percent cobbles; strongly effervescent; moderately alkaline (pH 8.0); clear smooth boundary.

Bqk--3 to 11 inches; pale brown (10YR 6/3) extremely gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; massive; soft, very friable, nonsticky and nonplastic; many very fine to fine, and common medium roots; common fine and very fine interstitial pores; 50 percent pebbles and 20 percent cobbles; common thin lime and silica filaments coating undersides of rock fragments; strongly effervescent; moderately alkaline (pH 8.0); clear irregular boundary.

R--11 inches; fractured hard bedrock.

Type location: Nye County, Nevada about 1 mile south of Stonewall Pass and U.S. 95, about 1,300 feet east and 2,600 feet north of the southwest corner of section 34, T.6 S., R.43 E.; (37 degrees, 22 minutes, 27 seconds north latitude and 117 degrees, 08 minutes, 40 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 58 degrees F.

Depth to bedrock: 10 to 20 inches.

Reaction: Moderately alkaline or strongly alkaline.

Control section:

Clay content--10 to 18 percent.

Rock fragments--35 to 70 percent.

A horizon:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--2 or 3.

Effervescence--Slightly effervescent to strongly effervescent.

Bqk horizon:

Value--6 through 8 dry, 4 through 6 moist.

Chroma--2 through 4.

Texture (less than 2 millimeters)--Fine sandy loam or sandy loam.

Rock fragments--45 to 70 percent, cobbles and pebbles.

Secondary lime accumulation--Lime occurs as pendants or coatings on rock fragments or as soft masses and filaments.

Effervescence--Strongly effervescent or violently effervescent.

Other features--Accessory silica pendants or coatings are present in some pedons.

Purob series

The Purob series consists of shallow to a duripan, well drained soils that formed in alluvium derived from limestone. Purob soils are on fan remnants. Slopes are 2 to 50 percent. Mean annual precipitation is about 9 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, mesic, shallow Calcic Petrocalcids

Typical pedon: Purob gravelly sandy loam, in map unit 2062. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; pale brown (10YR 6/3) gravelly sandy loam, yellowish brown (10YR 5/4) moist; moderate thin and medium platy structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine and fine vesicular pores; 20 percent pebbles; strongly effervescent; moderately alkaline (pH 8.2); gradual smooth boundary.

Bk1--3 to 10 inches; yellowish brown (10YR 5/4) very gravelly loam, brown (10YR 4/3) moist; massive; soft, very friable, slightly sticky and slightly plastic; common very fine and fine, few medium and coarse roots; common very fine and fine tubular pores; 35 percent pebbles; few fine soft lime filaments; strongly effervescent; moderately alkaline (pH 8.2); gradual wavy boundary.

Bk2--10 to 19 inches; pale brown (10YR 6/3) very gravelly loam, yellowish brown (10YR 5/4) moist; massive; soft, friable, slightly sticky and slightly plastic; common medium and coarse few very coarse

roots; common very fine and fine tubular and common very fine irregular pores; 35 percent pebbles; many thick lime coats on pebbles and about 5 percent lime cemented fragments; violently effervescent; strongly alkaline (8.6); abrupt wavy boundary.

Bqkm--19 to 26 inches; very pale brown (10YR 7/3) indurated petrocalcic with 10 to 20 millimeter laminar cap; light yellowish brown (10YR 6/4) moist; massive; extremely hard, extremely firm; violently effervescent.

Type location: Nye County, Nevada; about 1,500 feet north and 2,300 feet west of the projected southeast corner of section 4, T.17 S., R.54 E.; (36 degrees, 29 minutes, 52 seconds north latitude and 115 degrees, 54 minutes, 44 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in upper part in late winter and mid to late summer and intermittently moist for 10 to 20 days from July to October following summer convection storms.

Soil temperature: 53 to 58 degrees F.

Depth to petrocalcic horizon: 14 to 20 inches.

Reaction: Moderately alkaline or strongly alkaline.

Calcium carbonate equivalent: Less than 20 millimeter fraction, 40 to 60 percent.

Effervescence: Strongly effervescent or violently effervescent.

Control section:

Clay content--8 to 18 percent.

Rock fragments--35 to 70 mainly pebbles.

A horizon:

Value--6 or 7 dry, 5 or 6 moist.

Chroma--3 or 4.

Bk horizons:

Value--5 through 7 dry, 4 through 6 moist.

Chroma--3 or 4.

Consistence--Soft, very friable and friable, slightly sticky to sticky, slightly plastic to plastic.

Bqkm horizon:

Rupture resistance--Very strongly cemented to indurated.

Rumpah series

The Rumpah series consists of very deep, well drained soils that formed in alluvium derived from mixed

rocks. Rumpah soils are on lake plains. Slopes are 0 to 2 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 63 degrees F.

Taxonomic class: Fine, smectitic, thermic, Sodic Haplotorrerts

Typical pedon: Rumpah clay, in map unit 3302. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; pale brown (10YR 6/3) clay, brown (10YR 5/3) moist; strong very fine and fine granular structure; hard, firm, very sticky and very plastic; few very fine roots; few very fine tubular pores; violently effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bw--3 to 10 inches; pale brown (10YR 6/3) clay, brown (10YR 5/3) moist; strong coarse prismatic structure; hard, very firm, very sticky and very plastic; few very fine and fine tubular pores; few fine lime and gypsum flecks; 3 percent gypsum; violently effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bss1--10 to 22 inches; pale brown (10YR 6/3) clay, brown (10YR 5/3) moist; strong coarse prismatic structure; very hard, very firm, very sticky and very plastic; few fine tubular pores; few intersecting slickensides; few fine lime and gypsum flecks; violently effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bss2--22 to 32 inches; pale brown (10YR 6/3) clay, pale brown (10YR 6/3) moist; strong coarse prismatic structure; very hard, very firm, very sticky and very plastic; few fine tubular pores; few intersecting slickensides; few fine lime and gypsum flecks; violently effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bss3--32 to 54 inches; pale brown (10YR 6/3) clay, pale brown (10YR 6/3) moist; strong coarse prismatic structure parting to moderate medium angular blocky; very hard, very firm, very sticky and very plastic; few fine tubular pores; few intersecting slickensides; few fine lime flecks; violently effervescent; strongly alkaline (pH 8.9); clear smooth boundary.

2Bk--54 to 74 inches; white (N 8/0) clay, white (10YR 8/2) moist; moderate coarse prismatic structure parting to strong fine and medium subangular blocky; very hard, very firm, very sticky and very plastic; few fine tubular pores, mainly filled with lime; violently effervescent; strongly alkaline (pH 8.5)

Type location: Nye County, Nevada; in Pahrump Valley, about 2,375 feet south and 1,400 feet east of the northeast corner of section 20, T.20 S., R.53 E.;

(36 degrees, 11 minutes, 54 seconds north latitude and 116 degrees, 02 minutes, 40 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist during winter months and early spring and for 10 to 20 days following summer convection storms during the months of July through mid October.

Soil temperature: 62 to 66 degrees F.

Depth to 2Bk horizon: 40 to 65 inches.

Control section:

Clay content--Averages 45 to 60 percent.

Calcium carbonate equivalent--20 to 40 percent mainly disseminated lime.

Other features--1 to 5 centimeter wide vertical cracks, 8 to 18 inches apart extending from the surface to a depth of 36 to 50 inches, when soil is dry.

Gilgai features--Cracks are closed from 5 to 30 days in most years.

SAR--13 to 30 percent.

A horizon:

Value--5 or 6 dry, 4 or 5 moist.

Chroma--2 or 3.

Reaction--Moderately alkaline or strongly alkaline.

Bw and Bss horizons:

Value--5 through 7 dry, 4 through 6 moist.

Texture--Clay or silty clay.

Clay content--45 to 60 percent, weighted average.

Structure--Prismatic or angular blocky.

Consistence--Hard or very hard, very firm or extremely firm, sticky or very sticky.

Reaction--Moderately alkaline or strongly alkaline.

2Bk horizon:

Hue--10YR, 2.5Y or N.

Value--7 or 8 dry or moist.

Chroma--0 through 2.

Texture--Clay or silty clay.

Clay content--45 to 60 percent weighted average.

Calcium carbonates equivalent--40 to 60 percent.

Sanwell series

The Sanwell series consists of very deep, well drained soils that formed in coarse lacustrine sediments. Sanwell soils are on alluvial flats. Slopes are 0 to 8 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 61 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, thermic Duric Torriorthents

Typical pedon: Sanwell gravelly fine sandy loam, in map unit 2441. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 30 percent pebbles and 5 percent cobbles.

A--0 to 3 inches; very pale brown (10YR 7/3) gravelly fine sandy loam, yellowish brown (10YR 5/6) moist; moderate medium platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine vesicular and few very fine and fine interstitial pores; 25 percent pebbles; violently effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bk--3 to 9 inches; very pale brown (10YR 7/4) gravelly fine sandy loam, yellowish brown (10YR 5/6) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; few very fine, fine and coarse roots; many very fine and common fine interstitial pores; 15 percent pebbles; few very fine lime filaments; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bky--9 to 16 inches; very pale brown (10YR 7/3) gravelly fine sandy loam, yellowish brown (10YR 5/6) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine and few fine roots; common very fine interstitial pores; 15 percent pebbles; few weakly cemented lime pendants on underside of pebbles; few fine gypsum crystals; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bqk--16 to 31 inches; very pale brown (10YR 8/3) very gravelly sandy loam, very pale brown (10YR 7/4) moist; massive; hard, firm and brittle, nonsticky and nonplastic; many very fine and few fine roots; common very fine interstitial pores; 40 percent pebbles; continuous weak brittle matrix; many silica/lime pendants on undersides of pebbles; violently effervescent; strongly alkaline (pH 8.8) diffuse irregular boundary.

C--31 to 60 inches; variegated pink (7.5YR 8/4) reddish yellow (7.5YR 7/6), white (10YR 8/1) and very pale brown (10YR 7/3) very gravelly coarse sandy loam; massive; slightly hard, firm, nonsticky and nonplastic; common very fine roots; few very fine interstitial pores; 45 percent pebbles; violently effervescent; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada; about 7 miles southeast of Amargosa Valley, about 1,600 feet west and 500 feet north of the southeast corner of section 11, T.16 S., R.50 E.; (36 degrees, 34 minutes, 12 seconds north latitude and 116 degrees, 18 minutes, 59 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist during winter and early spring, and for 10 to 20 days following convection storms from July through mid October.

Soil temperature: 64 to 72 degrees F.

Depth to weak continuous brittle matrix: 12 to 24 inches.

Control section:

Clay content--5 to 10 percent.

Rock fragments--Average 35 to 60 percent.

A horizon:

Value--6 or 7 dry; 5 or 6 moist.

Chroma--3 through 6.

Effervescence--Strongly effervescent or violently effervescent.

Bk & Bky horizon:

Value--6 through 8 dry, 5 through 6 moist.

Chroma--3 or 6.

Structure--Coarse or medium subangular blocky or is massive.

Texture of fine earth--Fine sandy loam, sandy loam, coarse sandy loam.

Other features--Some pedons have lime and silica coats or pendants on underside of pebbles and few to common weakly cemented masses.

Bqk horizons:

Value--7 or 8 dry or moist.

Chroma--1 through 5.

Consistence--Hard or very hard, dry, firm and brittle, moist.

Cementation--Very weak or weak.

C horizon:

Hue--7.5YR or 10YR.

Rock fragments--35 to 60 percent.

Other features--Lacustrine deposits highly variable in color, consistence, stratification and lime content.

Schader series

The Schader series consists of moderately deep, well drained soils on mountains. Schader soil formed in colluvium and residuum from quartzite. Slopes are 15 to 50 percent. The mean annual precipitation is about 11 inches and the mean annual temperature is about 52 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, superactive, mesic Xeric Haplargids

Typical pedon: Schader extremely gravelly sandy loam located in map unit 2434, rangeland. (Colors are for dry soil unless otherwise noted). The soil surface is partially covered with 60 percent pebbles, 10 percent cobbles, and 3 percent stones and boulders.

A1--0 to 2 inches; yellowish brown (10YR 5/4) extremely gravelly sandy loam, dark yellowish brown (10YR 3/4) moist; weak thick platy structure parting to strong medium granular; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common very fine vesicular and tubular pores; 60 percent pebbles, 5 percent cobbles and 2 percent stones; moderately alkaline (pH 8.0); abrupt smooth boundary.

A2--2 to 9 inches; yellowish brown (10YR 5/4) very gravelly loam, dark yellowish brown (10YR 4/4) moist; weak medium subangular blocky structure parting to moderate medium granular; soft, very friable, slightly sticky and slightly plastic; many very fine and common fine roots; many very fine and fine tubular pores; 45 percent pebbles and 5 percent cobbles; slightly effervescent; moderately alkaline (pH 8.0); abrupt wavy boundary.

Btk1--9 to 17 inches; yellowish brown (10YR 5/4) extremely gravelly sandy clay loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; soft, friable, slightly sticky and slightly plastic; many very fine and common fine and medium roots; common very fine and fine tubular pores; few faint and distinct clay films bridging sand grains; 55 percent pebbles and 5 percent cobbles; 1 percent fine and medium soft masses of lime, about half of rock fragments have thin, patchy lime pendants; violently effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Btk2--17 to 28 inches; light yellowish brown (10YR 6/4) extremely gravelly sandy clay loam, yellowish brown (10YR 5/4) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and few fine through coarse roots; common very fine and fine tubular pores; common distinct clay films on faces of peds and lining pores; 65 percent pebbles and 15 percent cobbles; 3 percent fine and medium soft masses of lime, about half of rock fragments have thin, continuous lime pendants; violently effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

R--28 inches; extremely hard, fractured quartzite bedrock.

Type location: Nye County, Nevada; in the Spring Mountains approximately 0.5 miles southeast of Santa

Cruz Spring and about 600 feet south and 2,200 feet west of the northeast corner of section 4, T. 19 S., R. 54 E.; (36 degrees, 20 minutes, 13.22 seconds north latitude and 115 degrees, 54 minutes, 45.47 seconds west longitude) (GPS measurement); NAD 27; Horse Springs quadrangle.

Range in Characteristics:

Soil moisture: Usually dry, moist during winter and early spring and partly moist for 10 to 30 days in July through October following summer convection storms. Xeric aridic soil moisture regime.

Soil temperature: 55 to 59 degrees.

Depth to bedrock: 20 to 40 inches.

Control section:

Clay content--20 to 30 percent.

Rock fragments--Averages 60 to 75 percent, mainly quartzite pebbles.

A horizon:

Value--5 or 6 dry, 4 or 5 moist.

Chroma--3 or 4.

Reaction--Mildly alkaline or moderately alkaline.

Btk horizons:

Value--5 or 6 dry, 4 or 5 moist.

Chroma--3 or 4.

Texture--Sandy clay loam, loam or clay loam.

Rock fragments--Averages 60 to 75 percent, mainly quartzite pebbles; subhorizons range from 45 to 85 percent in some pedons.

Structure--Subangular blocky or is massive.

Consistence--Slightly sticky or moderately sticky and slightly plastic or moderately plastic

Calcium carbonate--1 to 10 percent calcium carbonate equivalent.

Effervescence--Moderately through violently effervescent, increasing with depth.

Scottcas series

The Scottcas series consists of very deep, well drained soils that formed in mixed alluvium derived from mixed rocks. Scottcas soils are on fan remnants. Slopes are 0 to 8 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 61 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic Durinodic Haplargids

Typical pedon: Scottcas very gravelly sandy loam, in map unit 2850. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 70 percent pebbles, 13 percent cobbles, and 2 percent stones.

A--0 to 2 inches; light brownish gray (10YR 6/2) very gravelly sandy loam, brown (10YR 4/3) moist; weak coarse prismatic structure parting to weak thin platy; soft, very friable, nonsticky and nonplastic; few very fine roots; many fine and medium vesicular and few very fine tubular pores; 35 percent pebbles and 5 percent cobbles; strongly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bt--2 to 7 inches; brown (7.5YR 5/2) very gravelly sandy clay loam, dark brown (7.5YR 4/4) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine roots; common very fine and fine interstitial pores; few thin clay films on faces of peds and lining pores; 45 percent pebbles and 5 percent cobbles; patchy thin silica-lime coatings on undersides of rock fragments; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Bqk1--7 to 15 inches; light brown (7.5YR 6/4) extremely gravelly sandy loam, brown (7.5YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and few medium roots; many very fine and fine interstitial pores; common silica-lime coatings on undersides of rock fragments; 60 percent pebbles and 2 percent cobbles; strongly effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

Bqk2--15 to 21 inches; white (10YR 8/2) very gravelly loamy coarse sand, very pale brown (10YR 7/3) moist; 60 percent of horizon is strongly silica-lime cemented plates, with a 2 to 4 millimeter thick laminar silica cap on individual plates; 50 percent pebbles; violently effervescent; strongly alkaline (pH 9.0); clear wavy boundary.

Bqk3--21 to 60 inches; very pale brown (10YR 7/3) extremely gravelly loamy coarse sand, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; many very fine and fine interstitial pores; many very thick silica-lime coats on undersides of rock fragments; 60 percent pebbles and 10 percent cobbles; violently effervescent; strongly alkaline (pH 9.0).

Type location: Nye County, Nevada; approximately one and 1.5 miles east of Bonnie Claire Lake, about 1,800 feet west and 2,400 feet north of the projected

southeast corner of section 15, T.9 S., R.43 E.; (37 degrees, 09 minutes, 14 seconds north latitude and 117 degrees, 08 minutes, 12 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during the winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 59 to 64 degrees F.

Depth to discontinuous cemented layer: 10 to 20 inches.

Control section:

Clay content--7 to 15 percent by average.

Rock fragments--60 to 75 percent by average, mainly pebbles, but contains 2 to 10 percent cobbles.

A horizon:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--2 through 4.

Effervescence--Slightly effervescent or strongly effervescent.

Bt horizon:

Hue--5YR or 7.5YR.

Value--5 or 6 dry, 4 or 5 moist.

Chroma--2 through 4.

Texture of fine earth--Clay loam, loam or sandy clay loam.

Clay content--20 to 30 percent.

Rock fragments--35 to 60 percent mainly pebbles, but contains 2 to 10 percent cobbles.

Effervescence--Slightly effervescent or strongly effervescent.

Bqk1 horizon:

Hue--5YR, 7.5YR or 10YR.

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Clay content--5 to 15 percent.

Rock fragments--60 to 85 percent mainly pebbles, but contains 2 to 10 percent cobbles.

Effervescence--Strongly effervescent or violently effervescent.

Bqk2 horizon:

Value--7 or 8 dry, 6 or 7 moist.

Chroma--2 through 4.

Cementation--Discontinuous weakly to strongly silica-lime cemented plates and lenses, comprising about 50 to 75 percent of horizon volume.

Rock fragments--40 to 60 percent, but contains 5 to 10 percent cobbles.

Reaction--Strongly alkaline or very strongly alkaline.

Bqk3 horizon:

Value--6 or 7 dry, 5 or 6 moist.

Chroma--2 through 4.

Texture of fine earth--Stratified sandy loam, loamy sand, coarse sandy loam or loamy coarse sand.

Clay content--4 to 10 percent.

Rock fragments--55 to 85 percent, mainly pebbles, but contains 5 to 10 percent cobbles.

Cementation--Some pedons contain weakly silica-lime cemented strata.

Reaction--Strongly alkaline or very strongly alkaline.

Effervescence--Strongly effervescent or violently effervescent.

Sed series

The Sed series consists of moderately deep, well drained soils formed in residuum derived from quartzite and volcanic rocks. Sed soils are on mountains. Slopes are 15 to 50 percent. Mean annual precipitation is about 13 inches and mean annual temperature is about 50 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Ustic Haplargids

Typical pedon: Sed very gravelly loam, in map unit 2930. (Colors are for dry soil unless otherwise noted). The soil surface is partially covered with approximately 30 percent pebbles and 15 percent cobbles.

A1--0 to 3 inches; pale brown (10YR 6/3) very gravelly loam, brown (10YR 4/3) moist; weak thick platy structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine roots; common very fine tubular pores; 45 percent pebbles; slightly alkaline (pH 7.8); abrupt wavy boundary.

A2--3 to 7 inches; pale brown (10YR 6/3) gravelly loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common medium and coarse, few very coarse roots; common fine and medium tubular pores; 15 percent pebbles; moderately alkaline (pH 8.0); clear wavy boundary.

Bt1--7 to 20 inches; brown (10YR 5/3) very gravelly loam, dark brown (10YR 4/3) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; few medium and coarse, common very fine and fine roots;

common fine and medium tubular pores; common thin clay films on faces of peds; 35 percent pebbles; moderately alkaline (pH 8.0); clear wavy boundary.
 Bt2--20 to 24 inches; light yellowish brown (10YR 6/4) extremely stony clay loam, yellowish brown (10YR 5/4) moist; weak fine subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common medium and coarse, few very fine roots; common medium and coarse interstitial, common fine tubular pores; few fine distinct clay films on faces of peds; 30 percent pebbles, 25 percent stones, and 10 percent cobbles; moderately alkaline (pH 8.0); abrupt wavy boundary.
 R--24 inches; extremely hard fractured quartzite bedrock.

Type location: Nye County, Nevada; in the Spring Mountains, approximately 17 miles north of Pahrump, about 1,500 feet south and 1,000 feet east of the projected northwest corner of section 25, T.17 S., R.53 E.; (36 degrees, 26 minutes, 58 seconds north latitude and 115 degrees, 58 minutes, 25 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist during winter and early spring and for 10 to 20 days July through October following convection storms.

Soil temperature: 53 to 58 degrees.

Depth to bedrock: 20 to 40 inches.

Control section:

Clay content--20 to 30 percent.

Rock fragments--Averages 40 to 60 percent.

A horizons:

Value--5 or 6 dry, 4 or 5 moist.

Reaction--Slightly alkaline or moderately alkaline.

Bt horizons:

Value--5 or 6 dry, 4 or 5 moist.

Chroma--3 or 4.

Texture--Very gravelly loam or very gravelly clay loam, in upper part, extremely stony clay loam or extremely stony loam in lower part.

Structure--Subangular blocky or massive.

Consistence--Slightly sticky or sticky and slightly plastic or plastic.

mountains and have slopes of 30 to 75 percent. The mean annual precipitation is about 13 inches and the mean annual temperature is about 51 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Lithic Haplustolls

Typical pedon: Seralin extremely gravelly very fine sandy loam, in map unit 1321. (Colors are for dry soil unless otherwise noted.) The surface is partially covered with 65 percent pebbles, 10 percent cobbles, and 5 percent stones.

A1--0 to 2 inches; brown (10YR 5/3) extremely gravelly very fine sandy loam, dark brown (10YR 3/3) moist; moderate medium and thin platy structure parting to weak fine subangular blocky; soft, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine and fine interstitial and vesicular pores; 65 percent pebbles, 10 percent cobbles, and 5 percent stones; noneffervescent; moderately alkaline (pH 8.0); clear smooth boundary.

A2--2 to 7 inches; brown (10YR 4/3) very gravelly loam, dark brown (10YR 3/3) moist; weak fine to medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many very fine and fine, common medium and few coarse roots; many very fine and fine interstitial and common fine tubular pores; 50 percent pebbles and 5 percent cobbles; noneffervescent; moderately alkaline (pH 8.0); clear wavy boundary.

Bk--7 to 14 inches; brown (10YR 4/3) very gravelly loam, dark brown (10YR 3/3) moderate medium subangular blocky structure; soft, very friable; slightly sticky and slightly plastic; common very fine and fine and many medium roots; common very fine and fine interstitial and tubular pores; many thin lime coats on the undersides of coarse rocks; 40 percent pebbles and 15 percent cobbles; slightly effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

R--14 inches; limestone bedrock.

Type location: Clark County, Nevada; approximately 2 miles north of Whitney Ranch in the south end of the Virgin Mountains; about 1,000 feet south and 1,500 feet east of the northwest corner of section 15, T.16 S., R.71 E.; (36 degrees, 32 minutes, 47 seconds north latitude and 114 degrees, 03 minutes, 10 seconds west longitude.)

Range in Characteristics:

Soil moisture: Moist in late summer and for short periods in winter and early spring. Has an ustic soil moisture regime that borders on an aridic regime.

Seralin series

The Seralin series consists of very shallow and shallow, well drained soils formed in residuum and colluvium derived from limestone. Seralin soils are on

Soil temperature: 49 to 58 degrees F.

Depth to bedrock: 8 to 14 inches.

Thickness of mollic epipedon: 8 to 14 inches.

Control section:

Percent clay--10 to 18 percent.

Rock fragments--50 to 80 percent, mainly pebbles.

A horizons:

Value--4 or 5 dry, 3 or 4 moist. Where moist value of 4 occurs, the soil when mixed to 7 inches has value of 3.

Chroma--2 or 3

Effervescence--Noneffervescent; some pedons are slightly effervescent in the upper part due to recharge from dust.

Bk horizon:

Value--4 through 6 dry, 3 or 4 moist

Chroma--2 through 4

Texture of the fine earth--Very fine sandy loam or loam

Consistence--Slightly hard or soft, friable or very friable

Secondary lime accumulation--Identifiable secondary carbonates as coating, pendants or soft filaments.

Calcium carbonate equivalent--Content of the <20 millimeter fraction, 20 to 30 percent by weight; 1 to 5 percent in the less than 2 mm fraction.

Sezna series

The Sezna series consists of shallow over an indurated petrocalcic, well-drained soils that formed in alluvium derived from limestone and mixed rocks. Sezna soils are on ballenas. Slopes are 2 to 8 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 60 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic, shallow Argic Petrocalcids

Typical pedon: Sezna gravelly sandy loam, in map unit 2860. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 50 percent pebbles, 5 percent cobbles, and 1 percent stones.

A--0 to 3 inches; pale brown (10YR 6/3) gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; weak very fine granular structure; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine and fine interstitial pores; 25 percent pebbles and 2 percent cobbles; violently effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

Btk--3 to 18 inches; light yellowish brown (10YR 6/4) very cobbly clay loam, yellowish brown (10YR 5/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; common very fine and fine and few medium roots; many very fine and fine interstitial and few very fine tubular pores; few thin clay films bridging and coating sand grains; 25 percent pebbles and 20 percent cobbles; common thick lime coats on undersides of rock fragments; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

Bkm--18 to 60 inches; white (10YR 8/2) indurated petrocalcic, very pale brown (10YR 7/3) moist; massive; violently effervescent.

Type location: Nye County, Nevada; approximately 5 miles southwest of Johnnie, about 1,700 feet west and 1,450 feet south of the northeast corner of section 34, T.18 S., R.52 E.; (36 degrees, 20 minutes, 52 seconds north latitude and 116 degrees, 06 minutes, 34 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods of time in the late winter.

Soil temperature: 62 to 67 degrees F.

Depth to petrocalcic horizon: 10 to 20 inches.

Reaction: Moderately alkaline or strongly alkaline.

Control section:

Clay content--25 to 35 percent.

Rock fragments--35 to 60 percent, mainly cobbles.

A horizon:

Value--5 through 7 dry, 3 or 4 moist.

Chroma--3 or 4.

Btk horizon:

Value--5 through 7 dry, 3 through 5 moist.

Texture--Very cobbly sandy clay loam, very cobbly clay loam or very cobbly loam.

Clay content--25 to 35 percent.

Rock fragments--35 to 60 percent, mainly cobbles.

Bkm horizon:

Thickness--3 to 15 feet.

Rupture resistance--Very strongly cemented or indurated.

Shamock series

The Shamock series consists of moderately deep over a duripan well drained soils that formed in alluvium derived from mixed rocks. Shamock soils are on alluvial

flats. Slopes are 0 to 4 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 66 degrees F.

Taxonomic class: Coarse-loamy, mixed, superactive, thermic Typic Haplodurids

Typical pedon: Shamock gravelly fine sandy loam, in map unit 2070. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 40 percent pebbles and 1/4 to 1/2 inch mantle of windblown sand.

- A1--0 to 2 inches; pale brown (10YR 6/3) gravelly fine sandy loam, yellowish brown (10YR 5/4) moist; moderate medium platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots; common very fine vesicular and common very fine and fine interstitial pores; 25 percent pebbles; strongly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.
- A2--2 to 4 inches; pale brown (10YR 6/3) gravelly fine sandy loam, yellowish brown (10YR 5/4) moist; weak coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; few very fine and coarse roots; common very fine and few fine interstitial pores; 15 percent pebbles; violently effervescent; moderately alkaline (pH 8.2); clear wavy boundary.
- Bk1--4 to 16 inches; very pale brown (10YR 7/3) gravelly fine sandy loam, yellowish brown (10YR 5/4) moist; weak coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine, few fine and coarse roots; common very fine and few fine interstitial pores; few fine soft lime filaments; 20 percent pebbles; violently effervescent; moderately alkaline (pH 8.2); clear wavy boundary.
- Bk2--16 to 21 inches; very pale brown (10YR 7/4) gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine, few fine and coarse roots; common very fine and few fine interstitial pores; few lime filaments in cracks and pores; 20 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.
- Bqk--21 to 37 inches; very pale brown (10YR 7/4) gravelly fine sandy loam, yellowish brown (10YR 5/6) moist; massive; soft, very friable, nonsticky and nonplastic; many very fine and few fine roots; common very fine and few fine interstitial pores; 65 percent rounded and subangular weakly cemented durinodes; very thin lime-silica coats on undersides of rock fragments; 20 percent pebbles and 5 percent cobbles; strongly effervescent with lime coating on some durinodes and in some pores; strongly alkaline (pH 8.6); gradual irregular boundary.

2Bqkm1--37 to 58 inches; very pale brown (10YR 7/4) strongly cemented duripan with indurated lamellae, yellowish brown (10YR 5/6) moist; massive; very hard, very firm; few very fine roots in fractures; few very fine interstitial pores; 25 percent pebbles and 5 percent cobbles; violently effervescent; clear wavy boundary.

2Bqkm2--58 to 60 inches; very pale brown (10YR 8/3) strongly cemented and indurated hardpan with thin less than 1/16 inch laminar cap, brownish yellow (10YR 6/6) moist; massive; very hard and extremely hard, very firm and extremely firm; 40 percent pebbles and 5 percent cobbles; violently effervescent.

Type location: Nye County, Nevada; approximately 2,500 feet south and 100 feet east of the northwest corner of section 25, T.15 S., R.49 E.; (36 degrees, 37 minutes, 12 seconds north latitude and 116 degrees, 25 minutes, 10 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 64 to 70 degrees F.

Other features: A thin layer (1/4 to 1/2 inch thick) of loose windblown sand commonly covers the surface.

Depth to duripan: 25 to 40.

Control section:

Clay content--5 to 10 percent.

Rock fragments--15 to 35 percent, weighted average, mainly pebbles.

A horizons:

Value--6 or 7 dry; 4 or 5 moist.

Chroma--3 through 5.

Reaction--Moderately alkaline or strongly alkaline.

Effervescence--Noneffervescent to violently effervescent.

Bk1 horizon:

Value--6 or 7 dry; 5 or 6 moist.

Chroma--2 or 3 dry; 3 or 4 moist.

Structure--Weak or moderate, medium or coarse.

Effervescence--Strongly effervescent or violently effervescent.

Reaction--Moderately alkaline or strongly alkaline.

Bk2 horizon:

Value--6 or 7 dry; 5 or 6 moist.

Chroma--2 through 4 dry; 3 or 4 moist.

Effervescence--Strongly effervescent or violently effervescent.

Reaction--Moderately alkaline to very strongly alkaline.

Bqk horizon:

Value--6 or 7 dry.

Chroma--4 through 6 dry.

Effervescence--Strongly effervescent or violently effervescent. Durinodes interiors are commonly noneffervescent.

Reaction--Strongly alkaline or very strongly alkaline.

Durinodes--By volume, 30 to 90 percent of horizon.

2Bqkm horizons:

Value--7 or 8 dry; 5 or 6 moist.

Chroma--3 or 4 dry; 4 through 6 moist.

Rock fragment--20 to 60 percent, mainly pebbles.

Effervescence--Strongly effervescent or violently effervescent.

Reaction--Strongly alkaline or very strongly alkaline.

Cementation--Indurated in some subhorizons.

Rupture resistance--Strongly cemented to indurated.

Shorim series

The Shorim series consists of moderately deep to a duripan, well drained soils that formed in residuum derived from volcanic rocks. Shorim soils are on hills. Slopes are 2 to 30 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 63 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic Typic Haplodurids

Typical pedon: Shorim very gravelly sandy loam, in map unit 2280. The soil surface is partially covered with approximately 80 percent pebbles.

A1--0 to 3 inches; pale brown (10YR 6/3) very gravelly sandy loam, brown (10YR 5/3) moist; moderate thick platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots, many fine and medium vesicular and few very fine tubular pores; 50 percent pebbles; strongly effervescent; moderately alkaline (pH 8.0); clear wavy boundary.

A2--3 to 10 inches; pale brown (10YR 6/3) gravelly sandy loam, yellowish brown (10YR 5/4) moist; weak thin and medium platy structure; soft, very friable,

slightly sticky, slightly plastic; many very fine and fine vesicular, and common very fine tubular pores; 30 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); gradual wavy boundary.

Bk--10 to 21 inches; very pale brown (10YR 7/3) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine interstitial and common very fine tubular pores; 40 percent pebbles; common thick lime coats on undersides of pebbles; violently effervescent; strongly alkaline (pH 9.0); abrupt wavy boundary.

Bqkm--21 to 24 inches; pale brown (10YR 6/3) silica-lime cemented hardpan, with an indurated laminar cap, yellowish brown (10YR 5/4) moist; 1 to 5 inches thick.

R--24; extremely hard basalt bedrock.

Type location: Nye County, Nevada; 1,600 feet south and 2,600 feet east of the projected northwest corner of section 11, T.14 S., R.48 E.; (36 degrees, 45 minutes, 10 seconds north latitude and 116 degrees, 31 minutes, 59 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. The upper part of the moisture control section is moist for a very short time in late winter.

Soil temperature: 64 to 70 degrees F.

Depth to duripan: 20 to 38 inches.

Depth to bedrock: 21 to 40 inches.

Control section:

Clay content--5 to 15 percent.

Rock fragments--35 to 60 percent, mainly pebbles.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Bk horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Texture of fine earth--Fine sandy loam, sandy loam and coarse sandy loam.

Reaction--Strongly alkaline or very strongly alkaline.

Bqkm horizon:

Duripan--Continuous laminar cap directly on top of hard bedrock.

Rupture resistance--Very strongly cemented to indurated.

Silverbow series

The Silverbow series consists of very shallow and shallow over a indurated duripan, well drained soils that formed in colluvium and alluvium from basalt and related rocks. Silverbow soils are on fan remnants and hills. Slopes are 2 to 30 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic, shallow Typic Argidurids

Typical pedon: Silverbow gravelly sandy loam, in map unit 2750. (Colors are for dry soil unless otherwise noted.)

A--0 to 2 inches; light brownish gray (10YR 6/2) gravelly sandy loam, dark grayish brown (10YR 4/2) moist; moderate medium platy structure; slightly hard, very friable, slightly sticky and slightly plastic; few fine roots; many fine and very fine interstitial pores; 20 percent pebbles and 5 percent cobbles; strongly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bt--2 to 6 inches; light yellowish brown (10YR 6/4) very cobbly clay loam, brown (10YR 4/3) moist; moderate medium platy structure parting to moderate fine subangular blocky structure; slightly hard, friable, sticky and plastic; common medium and fine roots; common fine interstitial and tubular pores; 30 percent pebbles and 20 percent cobbles; few thin clay films on faces of peds and lining pores; slightly effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

Btk--6 to 10 inches; yellowish brown (10YR 5/4) very cobbly clay loam, dark yellowish brown (10YR 4/4) moist; moderate fine subangular blocky structure; hard, firm, sticky and plastic; common medium and fine and few very fine roots; common fine interstitial and tubular pores; 30 percent pebbles and 25 percent cobbles; common moderately thick clay films on faces of peds and lining pores; distinct carbonate pendants on lower surface of rock fragments; strongly effervescent; strongly alkaline (pH 8.8); abrupt wavy boundary.

Bqkm1--10 to 18 inches; white (10YR 8/2) indurated duripan, light gray (10YR 7/2) moist; massive; extremely hard, extremely firm, common fine and very fine roots matted on top and in horizontal fractures plates; laminar cap continuous; 30 percent pebbles, 30 percent cobbles, and 10 percent stones; violently effervescent; clear wavy boundary.

Bqkm2--18 to 26 inches; strongly cemented hardpan.

Type location: Nye County, Nevada; approximately 6 miles southwest of Mud Lake, about 200 feet south and 2,300 feet west of the northeast corner of section 4, T.2 S., R.43 E.; (37 degrees, 48 minutes, 03 seconds north latitude and 117 degrees, 09 minutes, 29 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to indurated pan: 8 to 14 inches.

Reaction: Moderately alkaline or strongly alkaline.

Other features: Some pedons have strongly cemented layers below the indurated duripan.

Control section:

Clay content--20 to 35 percent.

Rock fragments--50 to 70 percent, dominantly stones or cobbles.

A horizon:

Value--5 or 6 dry, 3 or 4 moist. (Dark colors due to parent material)

Chroma--2 or 3.

Effervescence--Noneffervescent to strongly effervescent.

Bt horizon:

Hue--7.5YR or 10YR.

Value--5 or 6 dry, 3 or 4 moist.

Chroma--3 or 4.

Texture (less than 2 millimeters)--Clay loam or sandy clay loam.

Rock fragments--50 to 70 percent, dominantly stones or cobbles.

Effervescence--Slightly effervescent or strongly effervescent.

Btk horizon:

Value--5 or 6 dry, 3 through 5 moist.

Chroma--3 or 4.

Texture (less than 2 millimeters): Clay loam or sandy clay loam.

Rock fragments--50 to 70 percent, mainly cobbles or stones.

Effervescence--Slightly effervescent to violently effervescent. Lime occurs as soft masses or filaments and as concretions in some pedons.

Skelon series

The Skelon series consists of moderately deep over an indurated duripan, well drained soils that formed in alluvium derived from mixed rocks. Skelon soils are on fan remnants. Slopes are 0 to 15 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic Typic Haplodurids

Typical pedon: Skelon gravelly sandy loam, in map unit 2181. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 45 percent pebbles and 2 percent cobbles. It has a 1/2 to 1 inch mantle of alluvial sand.

A1--0 to 2 inches; very pale brown (10YR 7/3) gravelly sandy loam, yellowish brown (10YR 5/4) moist; moderate thick platy structure; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine vesicular and few very fine and fine interstitial pores; 15 percent pebbles; violently effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

A2--2 to 4 inches; very pale brown (10YR 7/3) sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 10 percent pebbles; few thin lime coats on faces of peds and lining pores of some peds; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bw--4 to 13 inches; very pale brown (10YR 7/3) very gravelly fine sandy loam, light yellowish brown (10YR 6/4) moist; moderate medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; many very fine and few fine roots; many very fine and few fine interstitial pores; 45 percent pebbles and 5 percent cobbles; few thin lime-silica coats on undersides of rock fragments; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bqk1--13 to 20 inches; very pale brown (10YR 7/3) very gravelly coarse sandy loam, yellowish brown (10YR 5/4) moist; about 30 percent of horizon has moderate thin platy structure and the remainder is massive; soft, very friable, nonsticky and nonplastic; many very fine and few medium roots; common very fine interstitial pores; many lime and silica pendants are on undersides of rock fragments; 50 percent pebbles and 5 percent cobbles; violently effervescent; moderately alkaline (pH 8.4); gradual wavy boundary.

Bqk2--20 to 28 inches; very pale brown (10YR 8/3) very gravelly fine sandy loam, very pale brown (10YR 7/4) moist; massive; soft and slightly hard, very friable, nonsticky and nonplastic; many very fine and common medium roots; common very fine interstitial pores; few thin lime coatings along some fractures and pores; 40 percent pebbles and 5 percent cobbles; many lime and silica coatings are on undersides of rock fragments; violently effervescent; moderately alkaline (pH 8.4); clear irregular boundary.

Bqkm--28 to 44 inches; white (10YR 8/1) indurated duripan with thin continuous laminar cap, very pale brown (10YR 7/3) moist; massive; extremely firm; strongly cemented horizontal lenses in lower part; 30 percent pebbles and 5 percent cobbles; violently effervescent.

2B'qk1--44 to 52 inches; very pale brown (10YR 8/3) very gravelly sandy loam, very pale brown (10YR 7/3) moist; massive; slightly hard, very friable, nonsticky and nonplastic; common very fine interstitial pores; 40 percent pebbles and 5 percent cobbles; common weakly silica and lime-cemented masses and few discontinuous strongly silica and lime cemented plates; violently effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

2B'qk2--52 to 60 inches; very pale brown (10YR 8/3) extremely gravelly coarse sand, very pale brown (10YR 7/3) moist; single grain; loose, nonsticky and nonplastic; many very fine interstitial pores; 60 percent pebbles and 10 percent cobbles; common weakly and strongly silica and lime-cemented masses and discontinuous plates; violently effervescent; strongly alkaline (pH 8.6).

Type location: Nye County, Nevada; approximately 2.75 miles southeast of Amargosa Valley, about 1,700 feet south and 1,500 feet east of the northwest corner of section 32, T.15 S., R.50 E.; (36 degrees, 36 minutes, 28 seconds north latitude and 116 degrees, 22 minutes, 43 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 59 to 65 degrees F.

Depth to duripan: 20 to 40 inches.

Effervescence: Strongly effervescent or violently effervescent.

Control section:

Clay content--3 to 10 percent.

Rock fragments--35 to 60 percent, mainly pebbles.

A horizons:

Value--6 or 7 dry, 3 through 6 moist.

Chroma--2 or 3 dry, 3 or 4 moist.

Bw, Bqk1 and Bqk2 horizons:

Value--6 through 8 dry; 3 through 7 moist.

Chroma--2 through 4 dry; 3 through 6 moist.

Texture--Fine sandy loam or coarse sandy loam.

Rock fragments--35 to 60 percent weighted average, mainly pebbles.

Reaction--Slightly alkaline through strongly alkaline.

Bqkm horizon:

Rupture resistance--Very strongly cemented to indurated.

St. Thomas

The St. Thomas series consists of very shallow and shallow, well drained soils that formed in residuum and colluvium derived from limestone and dolomite. St. Thomas soils are on hills. Slopes are 8 to 75 percent. Mean annual precipitation is about 5 inches and mean annual temperature is about 65 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, thermic Lithic Torriorthents

Typical pedon: St. Thomas very stony fine sandy loam, in map unit 2080. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; very pale brown (10YR 7/3) very stony fine sandy loam, pale brown (10YR 6/3) moist; weak medium and thin platy structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; many fine and very fine vesicular pores; 30 percent pebbles, 10 percent stones, and 5 percent cobbles; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

Bk--3 to 12 inches; very pale brown (10YR 7/3) extremely gravelly loam, pale brown (10YR 6/3) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine, and few medium interstitial pores; 60 percent pebbles, 5 percent cobbles; occasional 1/4 to 1/2-inch diameter pockets and veins of white (10YR 8/2) soft lime masses near the lower

boundary; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

R--12 inches; extremely hard limestone.

Type location: Nye County Nevada; about 1,100 feet south and 1,900 feet east of the northwest corner of section 21, T.19 S., R.52 E.; (36 degrees, 17 minutes, 24 seconds north latitude and 116 degrees, 07 minutes, 59 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part of the moisture control section for short periods during the winter and early spring months and for 10 to 20 days cumulative following summer convection storms.

Soil temperature: 61 to 68 degrees F.*Depth to bedrock:* 4 to 14 inches.*Reaction:* Moderately alkaline or strongly alkaline.*Control section:*

Clay content--4 to 18 percent.

Rock fragments--60 to 85 percent, mainly cobbles or pebbles.

A horizon:

Hue--7.5YR or 10YR.

Value--6 through 8 dry, 4 through 7 moist.

Bk horizon:

Hue--7.5YR or 10YR.

Value--6 or 7 dry, 5 or 6 moist.

Texture--Loam, very fine sandy loam or fine sandy loam.

Rock fragments--50 to 85 percent cobbles and pebbles.

Consistence--Soft or slightly hard, nonsticky or slightly sticky.

Stargo series

The Stargo series consists of very deep, somewhat excessively drained soils that formed in alluvium derived from mixed rocks. Stargo soils are on lake plains. Slopes are 0 to 2 percent. Mean annual precipitation is about 5 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Fine-loamy over sandy or sandy skeletal, mixed, calcareous, mesic Duric Torrifluvents

Typical pedon: Stargo fine sandy loam, in map unit 2570. (Colors are for dry soil unless otherwise noted.)

A1--0 to 1 inch; pale brown (10YR 6/3) fine sandy loam, brown (10YR 5/3) moist; moderate thin platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine to medium vesicular pores; 10 percent pebbles; slightly effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

A2--1 to 4 inches; pale brown (10YR 6/3) loam, brown (10YR 5/3) moist; moderate medium platy structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine to coarse vesicular pores; strongly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

C1--4 to 11 inches; light yellowish brown (10YR 6/4) sandy clay loam, dark yellowish brown (10YR 4/4) moist; moderate thick platy structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine interstitial pores; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

2C2--11 to 13 inches; very pale brown (10YR 7/3) loamy fine sand, brown (10YR 5/3) moist; massive; soft, very friable; nonsticky and nonplastic; many very fine and fine roots; many very fine interstitial and tubular pores; 5 percent pebbles; strongly effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

2Cqk--13 to 60 inches; very pale brown (10YR 7/3) stratified sandy loam to very gravelly sand, brown (10YR 5/3) moist; massive; hard, firm, nonsticky and nonplastic; few very fine tubular pores; 10 percent pebbles; 40 percent weakly cemented durinodes; violently effervescent common thin lime coatings on durinodes; strongly effervescent; strongly alkaline (pH 8.8)

Type location: Nye County, Nevada; approximately 5 miles north of Stonewall Pass; about 1,000 feet east and 1,600 feet south of the northwest corner of section 4, T.6, R.43 E.; (37 degrees, 26 minutes, 59 seconds north latitude and 117 degrees, 09 minutes, 49 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to strongly contrasting layers: 11 to 17 inches.

Reaction: Moderately alkaline or strongly alkaline.

Organic matter: Decreases irregularly with depth.

Control section:

Clay content--27 to 35 percent in the upper part; averages 2 to 8 percent in the lower part.

Rock fragments--Average less than 15 percent, but thin strata with up to 55 percent pebbles in some pedons.

A horizon:

Value--6 or 7 dry, 3 through 5 moist

Chroma--2 through 4

Effervescence--Noneffervescent to strongly effervescent.

C horizon:

Value--6 or 7 dry, 3 through 5 moist.

Chroma--2 through 4.

Structure--Platy, some pedons have prismatic structure parting to platy.

Texture--Clay loam, sandy clay loam.

Consistence--Very friable or friable.

Effervescence--Slightly effervescent or strongly effervescent.

2C2 horizon:

Value--6 or 7 dry, 3 through 5 moist.

Chroma--2 through 4.

Structure--Platy, massive or single grain.

Texture--Stratified, averages loamy sand or sand, includes strata of sand, loamy sand, loamy fine sand, sandy loam, coarse sandy loam, fine sandy loam.

Consistence--Soft to slightly hard, dry; very friable or friable, moist.

Effervescence--Slightly effervescent or strongly effervescent.

2Cqk horizon:

Value--6 or 7 dry, 3 through 5 moist.

Chroma--2 through 4.

Texture--Stratified, averages loamy sand or sand, includes strata of sand, loamy sand, loamy fine sand, sandy loam, coarse sandy loam, fine sandy loam.

Structure--Massive or platy.

Consistence--Slightly hard or hard, very friable or friable.

Effervescence--Slightly effervescent or strongly effervescent.

Cementation--Cemented plates, discontinuous weak cementation or 20 to 45 percent durinodes.

Stewval series

The Stewval series consists of very shallow and shallow, well drained soils that formed in residuum and colluvium derived volcanic rocks. Stewval soils are found on mountains. Slopes are 15 to 50 percent. Mean annual

precipitation is about 8 inches and mean annual temperature is about 52 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Lithic Xeric Haplargids

Typical pedon: Stewval very gravelly fine sandy loam, in map unit 2681. (Colors are for dry soil unless otherwise noted.)

A--0 to 1 inch; pale brown (10YR 6/3) very gravelly fine sandy loam, dark brown (10YR 3/3) moist; moderate medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine vesicular pores; 30 percent pebbles, 10 percent cobbles, and 2 percent stones; slightly effervescent; slightly alkaline (pH 7.6); abrupt smooth boundary.

Bt--1 to 7 inches; brown (10YR 5/3) very gravelly loam, brown (10YR 4/3) moist; moderate fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine, fine and medium roots; many very fine and fine tubular pores; common thin clay films lining pores and coating faces of peds; 40 percent pebbles, 10 percent cobbles, and 5 percent stones; few thin lime and silica pendants on rock fragments; slightly effervescent; slightly alkaline (pH 7.6); clear wavy boundary.

R--7 inches; fractured rhyolite; common thin lime and silica coatings on fracture planes and capping the surface; few fine roots.

Type location: Nye County, Nevada; approximately 4 miles east of Goldfield, about 500 feet north and 2,500 feet east of the projected southwest corner of section 4, T.3 S., R.43 E.; (37 degrees, 42 minutes, 15 seconds north latitude and 117 degrees, 09 minutes, 38 seconds west longitude.)

Range in Characteristics:

Soil moisture: Moist in winter and spring months, dry in summer and fall except for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to bedrock: 4 to 14 inches.

Reaction: Slightly alkaline or moderately alkaline.

Effervescence: Slightly effervescent to violently effervescent.

Control section:

Clay content--18 to 27 percent.

Rock fragments--35 to 55 percent pebbles, 0 to 10 percent cobbles, 0 to 15 percent stones.

Calcium carbonate equivalent--1 to 5 percent.

A horizon:

Hue--10YR or 7.5YR.

Value--5 or 6 dry, 3 or 4 moist.

Chroma--2 or 3, dry or moist.

Bt horizon:

Hue--10YR, 7.5YR, or 5YR.

Value--5 or 6 dry, 3 through 5 moist.

Chroma--2 through 4, dry or moist.

Texture (less than 2 millimeters)--Loam or clay loam.

Structure--Subangular blocky or granular.

Consistence--Soft or slightly hard.

Other features--Silica and lime coating and pendants are on undersides of rock fragments in some pedons.

Stonell series

The Stonell series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Stonell soils are on fan remnants. Slopes are 2 to 8 percent. Mean annual precipitation is about 7 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Typic Haplargids

Typical pedon: Stonell gravelly sandy loam, in map unit 2660. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 50 percent pebbles and 5 percent cobbles.

A--0 to 3 inches; light brownish gray (10YR 6/2) gravelly sandy loam, brown (10YR 5/3) moist; moderate medium platy structure; soft, very friable, nonsticky and slightly plastic; few very fine roots; many fine and medium vesicular pores; 15 percent pebbles and 5 percent cobbles; violently effervescent; strongly alkaline (pH 8.8); abrupt smooth boundary.

Btk--3 to 8 inches; pink (7.5YR 7/4) very gravelly sandy clay loam, light brown (7.5YR 6/4) moist; moderate fine subangular blocky structure; slightly hard, friable, sticky and plastic; common very fine and few medium roots; many very fine and fine tubular pores; common thin clay films on faces of peds and lining pores; common distinct silica-lime coats on undersides of rock fragments; 35 percent pebbles and 5 percent cobbles; violently effervescent; strongly alkaline (pH 8.6); gradual smooth boundary.

Bkq1--8 to 12 inches; pinkish gray (7.5YR 7/2) very gravelly sandy loam, light brown (7.5YR 6/4) moist;

massive; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; many very fine interstitial pores; many thick silica-lime coats on undersides of rock fragments; 45 percent pebbles and 5 percent cobbles; violently effervescent; strongly alkaline (pH 8.8); gradual smooth boundary.

Bqk2--12 to 28 inches; very pale brown (10YR 7/3) very gravelly sandy loam; light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine and fine interstitial pores; many very thick silica-lime coats on undersides of rock fragments; 35 percent pebbles and 5 percent cobbles; violently effervescent; strongly alkaline (pH 8.8); gradual wavy boundary.

Bkq3--28 to 60 inches; very pale brown (10YR 7/3) very gravelly loamy sand, light yellowish brown (10YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine and fine interstitial pores; many thick silica-lime coats on undersides of rock fragments; 40 percent pebbles and 5 percent cobbles; violently effervescent; very strongly alkaline (pH 9.2)

Type location: Nye County, Nevada; approximately .75 miles west of Mud Lake, about 2,500 feet east and 500 feet south of the northwest corner of section 24, T.1 S., R.43 E.; (37 degrees, 50 minutes, 36 seconds north latitude and 117 degrees, 06 minutes, 18 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry; moist in some part for short periods during the winter and early spring months and for 10 to 20 days cumulative due to summer convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to lower boundary of Bt horizon: 6 to 10 inches.

Effervescence: Strongly effervescent or violently effervescent.

Control section:

Clay content--7 to 12 percent.

Rock fragments--35 to 55 percent; mainly pebbles.

A horizon:

Value--6 or 7 dry, 5 or 6 moist.

Chroma--2 through 4.

Btk horizon:

Hue--7.5YR or 10YR.

Value--6 or 7 dry, 4 through 6 moist.

Chroma--2 through 4.

Texture of fine earth--Sandy clay loam, clay loam or loam.

Clay content--20 to 30 percent.

Rock fragments--35 to 60 percent mainly pebbles.

Structure--Subangular blocky or massive.

Consistence--Slightly sticky or sticky, slightly plastic or plastic.

Reaction--Moderately alkaline or strongly alkaline.

Bkq horizons:

Value--6 through 8 dry, 4 through 6 moist.

Chroma--2 through 4.

Texture--Stratified very gravelly sandy loam to very gravelly loamy sand.

Clay content--5 to 10 percent.

Consistence--Nonsticky or slightly sticky, nonplastic or slightly plastic.

Reaction--Strongly alkaline or very strongly alkaline.

Stonewall series

The Stonewall series consists of very deep, well drained soils that formed in mixed alluvium derived from mixed rocks. Stonewall soils are on fan remnants. Slopes are 8 to 15 percent. Mean annual precipitation is about 7 inches and mean annual temperature is about 56 degrees F.

Taxonomic class: Clayey-skeletal, smectitic, mesic Typic Paleargids

Typical pedon: Stonewall gravelly fine sandy loam, in map unit 2550. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 35 percent pebbles, 15 percent cobbles, and 10 percent stones.

A--0 to 4 inches; very pale brown (10YR 7/4) gravelly fine sandy loam, brown (10YR 5/3) moist; weak thin platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine and fine vesicular and few very fine tubular pores; 25 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bt1--4 to 10 inches; reddish brown (5YR 5/4) very gravelly clay, dark reddish brown (5YR 3/4) moist; weak coarse prismatic structure parting to strong fine and medium subangular blocky; hard, firm, very sticky and very plastic; many very fine and fine, and few medium roots; common very fine and fine tubular pores; many very thick clay films on faces of peds

and lining pores; 35 percent pebbles and 5 percent cobbles; slightly effervescent; moderately alkaline (pH 8.0); gradual smooth boundary.

Bt2--10 to 16 inches; light reddish brown (5YR 6/4) very gravelly sandy clay, reddish brown (5YR 4/4) moist; weak coarse prismatic structure parting to strong fine and medium subangular blocky; hard, firm, sticky and plastic; common very fine and fine, and few medium roots; common very fine and fine tubular pores; many thick clay films on faces of peds and lining pores; 45 percent pebbles and 5 percent cobbles; strongly effervescent; moderately alkaline (pH 8.0); gradual smooth boundary.

Bqk--16 to 42 inches; pinkish white (5YR 8/2) extremely gravelly coarse sandy loam, light reddish brown (5YR 6/4) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; many very fine and fine interstitial pores; 75 percent pebbles and 5 percent cobbles; few weakly lime- and silica-cemented pockets and seams; violently effervescent; strongly alkaline (pH 8.6); gradual smooth boundary.

Bk--42 to 60 inches; pink (5YR 7/3) extremely gravelly coarse sandy loam, light reddish brown (5YR 6/4) moist; massive, soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine and fine interstitial pores; 75 percent pebbles and 10 percent cobbles; few fine lime masses; violently effervescent; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada; approximately 5 miles northeast of Lida Junction, at the base of the Stonewall Mountains, about 1,200 feet south and 2,300 feet west of the northeast corner of section 1, T.5 S., R.43 E.; (37 degrees, 32 minutes, 24 seconds north latitude and 117 degrees, 06 minutes, 08 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry; moist in some part for short periods during the winter and early spring months and for 10 to 20 days cumulative following summer convection storms.

Soil temperature: 55 to 59 degrees F.

Rock fragments: 35 to 55 percent mainly pebbles.

Control section:

Clay content--35 to 60 percent.

A horizon:

Value--6 or 7 dry, 5 or 6 moist.

Chroma--2 through 4.

Bt horizons:

Hue--2.5YR, 5YR, or 7.5YR.

Value--5 through 7 dry, 3 through 6 moist.

Chroma--2 through 4.

Texture--Very gravelly clay, very gravelly clay loam or very gravelly sandy clay.

Rock fragments--35 to 55 percent mainly pebbles.

Reaction--Slightly alkaline or moderately alkaline.

Thickness--Combined thickness of argillic horizon ranges from 10 to 20 inches.

Bqk and Bk horizons:

Hue--5YR, 7.5YR, or 10YR.

Value--6 through 8 dry, 4 through 6 moist.

Chroma--2 through 4.

Texture--Very gravelly or extremely gravelly coarse sandy loam, very gravelly or extremely gravelly sandy loam.

Rock fragments--45 to 85 weighted average, mainly pebbles.

Other features--Weak silica- and lime cementation in some part; with discontinuous strongly cemented lenses in some pedons.

Strozi series

The Strozi series consists of moderately deep to a duripan well drained soils that formed in alluvium derived from mixed rocks. Strozi soils are on fan remnants. Slopes are 0 to 4 percent. Mean annual precipitation is about 8 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Fine-loamy, mixed, superactive, thermic Argidic Argidurids

Typical pedon: Strozi very gravelly fine sandy loam, in map unit 2820. The soil surface is partially covered with approximately 65 percent pebbles.

A1--0 to 2 inches; very pale brown (10YR 7/3) very gravelly fine sandy loam, yellowish brown (10YR 5/4) moist; moderate very thick platy structure; soft, very friable, nonsticky and nonplastic; common very fine roots; common very fine and fine vesicular pores; 35 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

A2--2 to 5 inches; very pale brown (10YR 7/3) fine sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and nonplastic; common very fine roots; common fine interstitial pores; 10 percent pebbles; moderately alkaline (pH 8.4); clear wavy boundary.

Bt--5 to 13 inches; reddish yellow (7.5YR 7/6) clay loam, strong brown (7.5YR 5/6) moist; weak coarse

prismatic structure parting to moderate medium subangular blocky; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; common fine interstitial pores; common thin clay films bridging sand grains; 5 percent pebbles; moderately alkaline (pH 8.4); clear wavy boundary.

Bqk--13 to 32 inches; very pale brown (10YR 7/4) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, very firm, nonsticky and nonplastic; common fine roots; common very fine and fine interstitial pores; 45 percent pebbles; 30 percent strongly cemented durinodes; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

Bqkm--32 to 33 inches; white (10YR 8/1) silica and lime-cemented hardpan with 1/2 to 1 millimeter discontinuous laminar cap; very pale brown (10YR 8/3) moist; massive; hard, very firm; strongly cemented grading to weakly cemented in the lower part; violently effervescent; clear wavy boundary.

Cqk--33 to 60 inches, light yellowish brown (10YR 6/4) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, very firm and brittle, nonsticky and nonplastic; few fine roots; common very fine and fine interstitial pores; 45 percent pebbles; weak continuous brittle matrix; violently effervescent; strongly alkaline (pH 8.6)

Type location: Nye County, Nevada; in Sarcobatus Flat about 12 miles northwest of the town of Beatty, about 2,000 feet east and 2,300 feet north of the projected southwest corner of section 11, T.10 S., R.45 E.; (37 degrees, 04 minutes, 53 seconds north latitude and 116 degrees, 54 minutes, 25 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist during the winter and early spring and for 10 to 20 days following summer convection storms July through October.

Soil temperature: 63 to 67 degrees F.

Depth to lower boundary of Bt horizon: 10 to 16 inches.

Depth to duripan: 20 to 40 inches.

Effervescence: Noneffervescent to violently effervescent.

Control section:

Clay content--27 to 35 percent.

Sand content--30 to 45 percent.

Rock fragments--5 to 15 percent.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Bt horizon:

Value--5 through 7 dry, 4 or 5 moist.

Chroma--3 through 6.

Rock fragments--5 to 15 percent.

Bqk horizon:

Value--5 through 8 dry or moist.

Chroma--1 through 4 dry, 3 or 4 moist.

Rock fragments--35 to 50 percent.

Reaction--Moderately alkaline or strongly alkaline.

Bqkm horizon:

Rupture resistance--Weakly cemented to strongly cemented.

Tanazza series

The Tanazza series consists of very deep, well drained soils that formed in lacustrine sediments. Tanazza soils are on lake terraces. Slopes are 0 to 8 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Fine-silty, gypsic, thermic Typic Calcigypsid

Typical pedon: Tanazza fine sandy loam, in map unit 4010. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 30 percent pan fragments.

A--0 to 2 inches; very pale brown (10YR 7/3) fine sandy loam, yellowish brown (10YR 5/4) moist; moderate medium platy structure; slightly hard, very friable, nonsticky and slightly plastic; common fine vesicular pores; calcium carbonate equivalent 27 percent; strongly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bk1--2 to 4 inches; pale brown (10YR 6/3) fine sandy loam, yellowish brown (10YR 5/4) moist; weak medium prismatic structure; soft, very friable, nonsticky and nonplastic; few fine roots; many fine interstitial pores; calcium carbonate equivalent 37 percent; violently effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bk2--4 to 15 inches; pale brown (10YR 6/3) silt loam, yellowish brown (10YR 5/4) moist; weak coarse prismatic structure; slightly hard, friable, sticky and slightly plastic; common fine and medium roots; many fine interstitial pores; lime is disseminated and common medium white (10YR 8/2) masses; calcium carbonate equivalent 50 percent; violently effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

2Bky1--15 to 26 inches; very pale brown (10YR 8/3) silty clay loam, very pale brown (10YR 7/3) moist; weak

coarse prismatic structure; hard, friable, very sticky and plastic; few fine and medium roots; few fine tubular pores; 5 percent gypsum crystals; calcium carbonate equivalent 75 percent; violently effervescent; strongly alkaline (pH 8.8); clear smooth boundary.

2Bky2--26 to 31 inches; white (10YR 8/2) silty clay loam, very pale brown (10YR 7/4) moist; weak coarse prismatic structure; hard, friable, very sticky and plastic; few fine roots; few fine tubular pores; 25 percent gypsum crystals; calcium carbonate equivalent 65 percent; violently effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

2Bky3--31 to 37 inches; pale brown (10YR 6/3) clay loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, firm, sticky and plastic; few fine roots; common fine tubular pores; 50 percent large honeycomb gypsum masses; few white (10YR 8/1) lime masses; calcium carbonate equivalent 15 percent; slightly effervescent matrix and strongly effervescent lime masses; strongly alkaline (pH 8.6); abrupt smooth boundary.

2Bky4--37 to 45 inches; white (10YR 8/2) silty clay loam, pale brown (10YR 6/3) moist; massive; hard, friable, sticky and plastic; few fine roots; few fine tubular pores; 10 percent gypsum crystals; calcium carbonate equivalent 70 percent; violently effervescent; strongly alkaline (pH 8.8); abrupt smooth boundary.

2Bky5--45 to 61 inches; light brownish gray (10YR 6/2) silty clay loam, yellowish brown (10YR 5/4) moist; massive; 75 percent large honeycomb gypsum masses; matrix is slightly hard, friable, sticky and plastic; few fine roots; few fine tubular pores; common small slightly effervescent patches; calcium carbonate equivalent 15 percent; noneffervescent; strongly alkaline (pH 8.6).

Type location: Nye County, Nevada; approximately 5 miles southwest of Pahrump, about 700 feet south and 2,300 feet west of the northeast corner of section 8, T.21 S., R.53 E.; (36 degrees, 08 minutes, 40 seconds north latitude and 116 degrees, 02 minutes, 08 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. The upper part of the soil moisture control section is moist for a short time in late winter and late summer for 10 to 20 days following summer convection storms.

Soil temperature: 62 to 67 degrees F.

Depth to calcic horizon: 4 to 6 inches.

Depth to gypsic horizon: 24 to 30 inches.

Calcium carbonate equivalent: 40 to 60 percent.

Gypsum: 15 to 40 percent.

Reaction: Moderately alkaline to strongly alkaline.

Control section:

Clay content--25 to 35 weighted average.

Texture--Silty clay loam, silt loam, and clay loam with less than 15 percent 15 percent fine sand or coarser.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4 dry or moist.

Reaction--Moderately alkaline or strongly alkaline.

Bk horizons:

Hue--10YR or 2.5Y.

Value--6 or 7 dry, 5 or 6 moist.

Chroma--3 or 4.

Texture--Fine sandy loam, very fine sandy loam, or silt loam.

Clay content--15 to 27 percent.

Reaction--Moderately alkaline or strongly alkaline.

2Bky1, 2Bky2, and 2Bky3 horizons:

Hue--10YR or 7.5Y.

Value--6 through 8 dry, 5 through 7 moist.

Chroma--2 through 4.

Texture--Silt loam or silty clay loam, clay loam in lower subhorizons.

Clay content--25 to 35 percent.

Reaction--Moderately alkaline or strongly alkaline.

2Bky4 and 2Bky5 horizons:

Hue--10YR or 2.5Y.

Value--6 through 8 dry, 5 or 6 moist.

Chroma--2 through 4.

Texture--Clay loam or silty clay loam.

Clay content--28 to 35 percent.

Reaction--Moderately alkaline or strongly alkaline.

Tecopa series

The Tecopa series consists of very shallow well drained soils that formed in residuum and colluvium derived from mixed rocks. Tecopa soils are on hills. Slopes are 15 to 75 percent. Mean annual precipitation is about 6 inches and mean annual air temperature is about 63 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, thermic Lithic Torriorthents

Typical pedon: Tecopa extremely gravelly sandy loam, in map unit 2301. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 75 percent pebbles and 5 percent cobbles.

A--0 to 1 inch; pale brown (10YR 6/3) extremely gravelly sandy loam, brown (10YR 5/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; few fine and very fine roots; common very fine interstitial pores; 65 percent pebbles; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

C--1 to 5 inches; light yellowish brown (10YR 6/4) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, nonsticky and nonplastic; few fine and very fine roots; common very fine and fine interstitial pores; 50 percent pebbles and 5 percent cobbles; strongly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Ck--5 to 7 inches; very pale brown (10YR 7/3) very gravelly sandy loam, brown (10YR 5/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; few fine and very fine roots; common fine interstitial pores; 50 percent pebbles and 5 percent cobbles; violently effervescent; moderately alkaline (pH 8.4); abrupt irregular boundary.

R--7 inches; extremely hard quartzite with lime coatings in rock fractures.

Type location: Nye County, Nevada; about 1,000 feet north and 1,000 feet east of the southwest corner of section 28, T.12 S., R.47 E.; (36 degrees, 51 minutes, 35 seconds north latitude and 116 degrees, 43 minutes, 48 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry for 6 months or more during most years, mainly during spring, summer, and fall months and are low in organic matter.

Soil temperature: 59 to 72 degrees F.

Depth to bedrock: 2 to 10 inches.

Control section:

Rock fragments--Range from 35 to 90 percent on surface and from 35 to 80 percent throughout. Either gravel or cobbles dominate, but a few stones may also be present.

Other features--Calcareous throughout and is mainly disseminated lime. Coatings on rock fragments and in bedrock fractures.

A horizon:

Hue--7.5YR or 10YR.

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 through 6.

C horizons:

Hue--10YR or 7.5YR.

Value--6 or 7 dry, 5 or 6 moist.

Chroma--3 or 4.

Texture--Very gravelly or very cobbly sandy loam or loam.

Other features--A Bk horizon is present in deeper profiles but may be lacking in shallower profiles.

Tognoni series

The Tognoni series consists of very shallow and shallow, well drained soils that formed in residuum and colluvium derived from volcanic rocks. Tognoni soils are on hills, mountains, and plateaus. Slopes are 4 to 50 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Lithic Haplargids

Typical pedon: Tognoni gravelly fine sandy loam, in map unit 2740. (Colors are for dry soil unless otherwise noted.)

A1--0 to 1 inch; pale brown (10YR 6/3) gravelly fine sandy loam, brown (10YR 4/3) moist; weak medium platy structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine vesicular pores; 20 percent pebbles and 5 percent cobbles; slightly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

A2--1 to 4 inches; pale brown (10YR 6/3) gravelly fine sandy loam, brown (10YR 4/3) moist; strong medium platy structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine vesicular and tubular pores; 20 percent pebbles and 5 percent cobbles; slightly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bt1--4 to 7 inches; brown (10YR 5/3) very cobbly clay loam, brown (10YR 4/3) moist; moderately fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine, and few medium roots; many very fine tubular pores; common thin clay films lining pores, few thin clay films on faces of peds; 20 percent pebbles and 20

percent cobbles; moderately alkaline (pH 8.2); clear smooth boundary.

Bt2--7 to 14 inches; yellowish brown (10YR 5/4) very cobbly clay loam, brown (10YR 4/3) moist; moderate fine subangular blocky structure; slightly hard, very friable, sticky and plastic; common very fine and fine roots; common very fine tubular pores; common moderately thick clay films on faces of peds and lining pores; 30 percent pebbles and 20 percent cobbles; common moderately thick silica and lime pendants on rock fragments in the lower part of the horizon; slightly effervescent; moderately alkaline (pH 8.4); abrupt irregular boundary.

R--14 inches; fractured basalt, very thin discontinuous silica-lime laminar cap and coatings in fractures.

Type location: Nye County, Nevada; approximately 4 miles southwest of Mud Lake, about 1,500 feet east and 150 feet north of the southwest corner of section 28, T.1 S., R.43 E.; (37 degrees, 48 minutes, 59 seconds north latitude and 117 degrees, 09 minutes, 49 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during late winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 50 to 55 degrees F.

Depth to bedrock: 5 to 14 inches.

Reaction: Moderately alkaline or strongly alkaline.

Control section:

Clay content--27 to 35 percent.

Rock fragments--45 to 70 percent mainly pebbles.

A horizons:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 or 3.

Effervescence--Slightly effervescent to violently effervescent.

Lower boundary--Abrupt or very abrupt.

Bt horizons:

Hue--10YR or 7.5YR.

Value--4 or 5 dry, 3 or 4 moist.

Chroma--3 or 4.

Texture (less than 2 millimeters)--Clay loam or clay.

Clay content--Averages 35 to 45 percent.

Rock fragments--45 to 70 percent, dominantly cobbles.

Structure--Subangular blocky or granular.

Effervescence--Noneffervescent to slightly effervescent.

Consistence--Soft to hard, very friable to friable to friable, slightly sticky to sticky, slightly plastic to plastic.

Other features--Silica and lime pendants are common in the lower part in most pedons.

Tokoper series

The Tokoper series consists of shallow and very shallow, well drained soils that formed in residuum and colluvium derived from volcanic rocks. Tokoper soils are on hills. Slopes are 4 to 50 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 56 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic, shallow Typic Argidurids

Typical pedon: Tokoper very cobbly sandy loam, in map unit 2251. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 60 percent pebbles, 20 percent cobbles, and 5 percent stones.

A--0 to 3 inches; light brownish gray (10YR 6/2) very cobbly sandy loam, grayish brown (10YR 5/2) moist; weak very thin and thin platy structure; soft, very friable, slightly sticky and nonplastic; few very fine roots, many fine and medium vesicular pores; 25 percent pebbles, 15 percent cobbles, and 2 percent stones; violently effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

Bt1--3 to 9 inches; light brown (7.5YR 6/4) very gravelly clay loam, brown (7.5YR 5/4) moist; moderate fine subangular blocky structure; slightly hard, friable, sticky and plastic; common very fine and few medium roots; common very fine tubular pores; many thin clay films on faces of peds and lining pores; 40 percent pebbles and 10 percent cobbles; strongly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Bt2--9 to 14 inches; light brown (7.5YR 6/4) extremely gravelly loam, brown (7.5YR 5/4) moist; weak fine subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; common very fine interstitial pores; common thin clay films on faces of peds; 50 percent pebbles and 20 percent cobbles; strongly effervescent; moderately alkaline (pH 8.0); clear wavy boundary.

Bqkm--14 to 15 inches; white (10YR 8/2) continuous indurated silica and lime laminar cap.

R--15 inches; unweathered welded tuff.

Type location: Nye County, Nevada; approximately 1.5 miles southwest of Stonewall Pass, about 1,400 feet north and 900 feet east of the southwest corner of section 33, T.6 S., R.43 E.; (37 degrees, 22 minutes, 15 seconds north latitude and 117 degrees, 09 minutes, 50 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during the winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 58 degrees F.

Depth to duripan: 8 to 14 inches

Depth to bedrock: 9 to 15 inches

Effervescence: Slightly effervescent to violently effervescent.

Control section:

Clay content--Averages 18 to 27 percent.

Rock fragments--Average 40 to 60 percent mainly pebbles with 5 to 15 percent cobbles.

A horizon:

Hue--7.5YR or 10YR.

Value--6 or 7 dry, 4 through 6 moist.

Chroma--2 or 3 dry, or moist.

Bt horizon:

Value--5 or 6 dry, 3 through 5 moist.

Chroma--2 through 4 dry, or moist.

Texture of fine earth--Sandy clay loam, loam or clay loam in the upper part; loam or sandy loam in the lower part.

Consistence--Soft or slightly hard, slightly sticky or sticky and slightly plastic or plastic.

Reaction--Moderately alkaline or strongly alkaline.

Rock fragments--35 to 55 percent in upper part 50 to 75 in lower part, averages 40 to 60 percent mainly pebbles with 5 to 15 percent cobbles.

Bqkm horizon:

Rupture resistance--Very strongly cemented to indurated.

Tomel series

The Tomel series consists of shallow over an indurated duripan, well drained soils that formed in alluvium derived from mixed rocks. Tomel soils are on fan remnants. Slopes are 2 to 8 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic, shallow Typic Argidurids

Typical pedon: Tomel very gravelly sandy loam, in map unit 2510. (Colors are for dry soil unless otherwise noted.)

A--0 to 3 inches; light gray (10YR 7/2) very gravelly sandy loam, grayish brown (10YR 5/2) moist; moderate thick platy structure; slightly hard, very friable, slightly sticky and slightly plastic; common medium and fine roots; many medium and fine vesicular pores; 40 percent pebbles; slightly effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

Bt1--3 to 7 inches; yellowish brown (10YR 5/4) gravelly clay loam, dark yellowish brown (10YR 4/4) moist; weak fine prismatic structure parting to moderate medium subangular blocky; slightly hard, very friable, sticky and plastic; many very fine, fine and medium roots; few medium vesicular and many fine and medium tubular pores; 25 percent pebbles; few thin and moderately thick clay films on faces of peds and lining pores; strongly alkaline (pH 8.8); abrupt smooth boundary.

Bt2--7 to 12 inches; pale brown (10YR 6/3) very gravelly sandy clay loam, dark brown (10YR 4/3) moist; moderate medium subangular blocky structure; slightly hard, very friable, slightly sticky and plastic; many very fine, fine and medium roots; common fine and medium tubular pores; 40 percent pebbles and 5 percent cobbles; few thin clay films lining pores; strongly effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Bk--12 to 19 inches; pale brown (10YR 6/3) extremely gravelly sandy loam, dark brown (10YR 4/3) moist; massive; hard, very friable, slightly sticky and slightly plastic; common fine roots; few fine and medium tubular pores; 55 percent pebbles and 5 percent cobbles; few thin lime coatings on pebbles; violently effervescent; strongly alkaline (pH 9.0); abrupt smooth boundary.

Bqkm--19 to 26 inches; white (10YR 8/2) extremely gravelly indurated duripan, very pale brown (10YR 7/3) moist; massive; extremely hard, very firm; few very fine roots; few fine interstitial pores; 60 percent pebbles and 5 percent cobbles; violently effervescent; clear smooth boundary.

2Bkq--26 to 60 inches; very pale brown (10YR 7/3) very gravelly sand, pale brown (10YR 6/3) moist; massive; very hard, firm, nonsticky and nonplastic; few fine roots; few fine interstitial pores; 45 percent pebbles and 5 percent cobbles; common white (10YR 8/1) silica and lime coatings on undersides of rock

fragments; violently effervescent; strongly alkaline (pH 9.0).

Type location: Nye County, Nevada; approximately .75 mile west of Stonewall Pass and U.S. 95, about 1,700 feet west and 2,500 feet north of the projected southeast corner of section 28, T.6 S., R.43 E.; (37 degrees, 23 minutes, 18 seconds north latitude and 117 degrees, 09 minutes, 18 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to duripan: 10 to 20 inches.

Effervescence: Noneffervescent to violently effervescent.

Other features: Some pedons have thin Bkq horizons immediately above the duripan.

Control section:

Clay content--20 to 30 percent.

Rock fragments--35 to 50 percent mainly pebbles.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 or 3.

Bt1 horizon:

Value--5 or 6 dry, 3 through 5 moist.

Chroma--3 or 4.

Structure--Prismatic or blocky.

Texture (less than 2 millimeters)--Clay loam or sandy clay loam, when mixed.

Rock fragments--10 to 35 percent mainly pebbles.

Bt2 horizon:

Structure--Massive or subangular blocky.

Rock fragments--40 to 65 percent.

Bqkm horizon:

Value--6 through 8 dry, 4 through 7 moist.

Chroma--2 through 4.

Rupture resistance--Very strongly cemented or indurated.

2Bqk horizon:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--1 through 3.

Rock fragments--50 to 75 percent mainly pebbles.

Unsel series

The Unsel series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Unsel soils are on fan remnants. Slopes are 2 to 15 percent. Mean annual precipitation is about 6 inches and mean annual temperature is 53 degrees F.

Taxonomic class: Fine-loamy, mixed, superactive, mesic Durinodic Haplargids

Typical pedon: Unsel gravelly sandy loam, in map unit 2760. (Colors are for dry soil unless otherwise indicated.)

A1--0 to 3 inches; very pale brown (10YR 7/3) gravelly sandy loam, yellowish brown (10YR 5/4) moist; moderate medium and thick platy structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine vesicular pores; 30 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

A2--3 to 7 inches; light gray (10YR 7/2) gravelly loam, brown (10YR 5/3) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine and few coarse vesicular pores; 15 percent pebbles; slightly effervescent; strongly alkaline (pH 8.8); abrupt smooth boundary.

Bt--7 to 11 inches; light yellowish brown (10YR 6/4) gravelly clay loam, yellowish brown (10YR 5/4) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; many very fine, fine and common coarse roots; many very fine and few fine interstitial pores; common thin clay films lining pores and on faces of peds; 25 percent pebbles; moderately alkaline (pH 8.4); abrupt wavy boundary.

Bqk--11 to 20 inches; very pale brown (10YR 8/3) gravelly sandy loam, light yellowish brown (10YR 6/4) moist; massive; hard, firm, and brittle, slightly sticky and slightly plastic; few very fine roots; many very fine interstitial pores; continuous weak brittle matrix; 30 percent pebbles; few thin carbonate coatings on underside of pebbles; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

2C1--20 to 43 inches; very pale brown (10YR 7/4) very gravelly sand, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; many very fine and fine and medium interstitial pores; 55 percent pebbles; many

silica and carbonate coatings on undersides of pebbles; strongly effervescent; strongly alkaline (pH 8.6).

2C2--43 to 60 inches; very pale brown (10YR 8/3) very gravelly loamy sand, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; common very fine and fine and few medium and coarse roots; 40 percent pebbles; violently effervescent; strongly alkaline (pH 9.0).

Type location: Nye County, Nevada; approximately 4.5 miles southwest of Mud Lake, about 2,000 feet south and 2,500 feet west of the northeast corner of section 11, T.2 S., R.43 E.; (37 degrees, 46 minutes, 53 seconds north latitude and 117 degrees, 07 minutes, 21 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to Bqk: 10 to 22 inches.

Depth to 2C horizon: 20 to 36 inches

Effervescence: Noneffervescent to violently effervescent.

Control section:

Clay content--27 to 35 percent.

Rock fragments--15 to 30 mainly pebbles.

A horizons:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Reaction--Moderately alkaline to very strongly alkaline.

Bt horizon:

Value--5 through 7 dry, 3 through 6 moist.

Chroma--2 through 4.

Texture (less than 2 millimeters)--Clay loam or sandy clay loam.

Rock fragments--15 to 30 percent mainly pebbles.

Structure--Weak or moderate, fine or medium subangular blocky, and weak medium or coarse prismatic structure.

Reaction--Slightly alkaline through strongly alkaline.

Consistence--Slightly hard or hard dry, very friable through very firm moist, slightly sticky or sticky and slightly plastic or plastic.

Bqk horizon:

Value--6 through 8 dry, 4 through 6 moist.

Chroma--2 through 4.

Texture (less than 2 millimeters)--Sandy loam, loam, or sandy clay loam

Rock fragments--15 to 35 percent mainly pebbles.

Consistence--Soft to hard, very friable to firm and brittle, nonsticky or slightly sticky and nonplastic or slightly plastic.

Silica cementation--Weakly cemented, most pedons have cementation with a brittle matrix that is firm when moist. Some pedons have zones of discontinuous cementation in strata and also have laminae of secondary silica.

2C horizon:

Value--6 through 8 dry, 3 through 5 moist.

Chroma--2 through 4.

Texture--Very gravelly sand, very gravelly loamy sand, or extremely gravelly sand.

Rock fragments--40 to 70 percent mainly pebbles with 0 to 5 percent cobbles in some pedons.

Consistence--Soft or slightly hard, very friable or friable.

Other features--20 to 65 percent discontinuous strong silica and lime cementation in some pedons.

Upspring series

The Upspring series consists of very shallow and shallow, somewhat excessively drained soils that formed in residuum and colluvium derived from volcanic rocks. Upspring soils are on hills. Slopes are 4 to 75 percent. Mean annual precipitation is about 6 inches and mean annual air temperature is about 63 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, thermic Lithic Torriorthents

Typical pedon: Upspring very gravelly sandy loam, in map unit 2971. (Colors are for dry soil unless otherwise noted.)

A--0 to 8 inches; pale brown (10YR 6/3) very gravelly sandy loam, dark brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, friable, nonsticky and nonplastic; few very fine roots; common very fine and fine vesicular pores; 30 percent pebbles and 10 percent cobbles; slightly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

Bk--8 to 12 inches; very pale brown (10YR 7/3) very gravelly fine sandy loam, brown (10YR 4/3) moist; weak medium subangular blocky structure; soft, friable, nonsticky and nonplastic; common very fine

and fine roots; common very fine and fine interstitial pores; 45 percent pebbles and 10 percent cobbles; common lime coats on underside of rock fragments; slightly effervescent; moderately alkaline (pH 8.0); abrupt wavy boundary.

R--12 inches; hard fractured volcanic tuff; common lime coatings on surface of rocks.

Type location: Nye County Nevada. about 2,900 feet north and 100 feet west of the southeast corner of section 8, T.11 S., R.47 E.; (36 degrees, 59 minutes, 44 seconds north latitude and 116 degrees, 44 minutes, 02 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months, and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 59 to 63 degrees F.

Depth to bedrock: 4 to 14 inches.

Effervescence: Slightly effervescent through violently effervescent.

Control section:

Clay content--10 to 18 percent

Rock fragments--Averages 35 to 60 percent.

A horizon:

Value--5 or 6 dry, 3 through 5 moist.

Chroma--3 or 4.

Bk horizon:

Value--5 through 7 dry, 4 through 6 moist.

Chroma--3 or 4.

Texture (less than 2 millimeters)--Averages fine sandy loam or sandy loam.

Structure--Massive or subangular blocky.

Vace series

The Vace series consists of very shallow and shallow to an indurated hardpan, well drained soils that formed in alluvium derived from mixed rocks. Vace soils are on ballenas. Slopes are 4 to 30 percent. Mean annual precipitation is about 7 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Loamy, mixed, superactive, thermic, shallow Typic Petrocalcids

Typical pedon: Vace gravelly sandy loam, in map unit 2061. (Colors are for dry soil unless otherwise noted.)

The soil surface is partially covered with approximately 30 percent pebbles.

A1--0 to 2 inches; pale brown (10YR 6/3) gravelly sandy loam, dark brown (7.5YR 4/4) moist; weak thin and medium platy structure that parts to weak fine granular; slightly hard, friable, slightly sticky, slightly plastic; few fine roots; few very fine and fine vesicular and many very fine and common fine tubular pores; 30 percent pebbles; strongly effervescent; slightly alkaline (pH 7.8); abrupt smooth boundary.

A2--2 to 7 inches; light brown (7.5YR 6/4) gravelly sandy loam, dark brown (7.5YR 4/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common fine roots; few very fine tubular pores; 15 percent pebbles and 10 percent cobbles; strongly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Bk1--7 to 12 inches; pink (7.5YR 8/4) and white (N/8) gravelly loam, pink (7.5YR 7/4) moist; massive; slightly hard, friable, slightly sticky and slightly plastic; common fine roots; few very fine tubular pores; 20 percent hard lime nodules and lime-coated pebbles; violently effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

Bkqm--12 to 24 inches; white (N/8) lime indurated hardpan, pinkish white (7.5YR 8/2) moist; hardpan has a thin laminar upper layer and appears to be stratified; massive; very hard, very firm, the laminar surface is extremely hard and extremely firm; few thin silica coats and discontinuous lenses; violently effervescent.

Type location: Nye County, Nevada; approximately 7 miles southwest of Mercury, about 3,400 feet north and 2,700 feet east of the northwest corner of section 2, T.16 S., R.52 E.; (36 degrees, 36 minutes, 22 seconds north latitude and 116 degrees, 05 minutes, 50 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods in winter and spring, and for short intermittent periods in summer, 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 62 to 71 degrees F.

Depth to hardpan: 4 to 14 inches.

Control section:

Clay content--8 to 18 percent.

Rock fragments--15 to 35 percent in the control section.

A horizons:

Hue--10YR or 7.5YR.
Value--6 or 7 dry, 4 or 5 moist.
Chroma--3 or 4.

Bk horizon:

Hue--10YR, 7.5YR.
Value--6 through 8, dry, 4 through 7 moist.
Chroma--2 through 4, dry or moist.
Texture--Loam or fine sandy loam.

Bqkm horizon:

Rupture resistance--Indurated.

Veet series

The Veet series consists of very deep, well drained soils that formed in mixed alluvium derived from mixed rocks. Veet soils are on inset fans. Slopes are 2 to 8 percent. Mean annual precipitation is about 9 inches and mean annual temperature is about 54 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic Xeric Haplocambids

Typical pedon: Veet very gravelly sandy loam, in map unit 2090. (Colors are for dry soil unless otherwise noted.)

A--0 to 5 inches; brown (10YR 5/3) very gravelly sandy loam, brown (10YR 4/3) moist; weak medium and coarse subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common fine and medium roots; few fine tubular and many fine and medium vesicular pores; 35 percent pebbles; moderately alkaline (pH 8.0); clear smooth boundary.

Bw--5 to 20 inches; brown (10YR 5/3) very gravelly sandy loam, brown (10YR 4/3) moist; moderate medium subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; many very fine and fine and few medium roots; common very fine and few fine interstitial and tubular pores; 25 percent pebbles and 10 percent cobbles; slightly alkaline (pH 7.8); clear smooth boundary.

Bk--20 to 60 inches; pale brown (10YR 6/3) very gravelly coarse sandy loam, brown (10YR 4/3) moist; massive; slightly hard, friable, nonsticky and nonplastic; few fine roots; few fine pores; 50 percent pebbles; common thin lime pendants on undersides of pebbles; strongly effervescent; moderately alkaline (pH 8.2).

Type location: Nye County, Nevada; approximately 1.5 mile south of Mud Springs, about 3,600 feet west and

2,500 feet north of the southeast corner of section 18, T.11 S., R.46 E.; (36 degrees, 58 minutes, 47 seconds north latitude and 116 degrees, 52 minutes, 23 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in winter and spring months, dry in summer and fall except for 10 to 20 days cumulative between July and October due to summer convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to secondary lime: 10 to 20 inches.

Control section:

Clay content--8 to 15 percent.

Rock fragments--35 to 65 percent mainly pebbles.

A horizon:

Value--5 or 6 dry, 3 or 4 moist.

Chroma--2 or 3.

Reaction--Slightly alkaline or moderately alkaline.

Effervescence--Noneffervescent or slightly effervescent.

Bw horizon:

Value--5 or 6 dry, 3 or 4 moist.

Chroma--2 through 4.

Structure--Weak to moderate, fine to medium subangular blocky structure.

Rock fragments--35 to 60 percent, mainly pebbles.

Consistence--Soft or slightly hard, nonsticky or slightly sticky, nonplastic or plastic.

Reaction--Slightly alkaline to moderately alkaline.

Effervescence--Noneffervescent to slightly effervescent.

Bk horizon:

Value--5 through 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Structure--Massive or subangular blocky.

Texture--Stratified gravelly sandy loam to very gravelly loamy coarse sand. Average sandy loam or coarse sandy loam.

Rock fragments--35 to 60 percent, mainly pebbles when mixed; individual strata range up to 85 percent.

Consistence--Soft or slightly hard, nonsticky or slightly sticky nonplastic or slightly plastic.

Reaction--Moderately alkaline or strongly alkaline.

Effervescence--Strongly effervescent or violently effervescent.

Other features--Thin lime coatings on the undersides of rock fragments.

Vigus series

The Vigus series consists of very deep, well drained soils that formed in alluvium derived from mixed rocks. Vigus soils are on fan remnants. Slopes are 0 to 4 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Fine-loamy, mixed, superactive, mesic Durinodic Haplargids

Typical pedon: Vigus gravelly sandy loam, in map unit 2520. (Colors are for dry soil unless otherwise noted.)

A1--0 to 3 inches; pale brown (10YR 6/3) gravelly sandy loam, brown (10YR 4/3) moist; weak medium platy structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine vesicular pores; 25 percent pebbles; slightly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

A2--3 to 7 inches; very pale brown (10YR 7/3) sandy loam, brown (10YR 4/3) moist; weak fine subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine tubular pores; 10 percent pebbles; slightly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bt--7 to 13 inches; light yellowish brown (10YR 6/4) loam, dark yellowish brown (10YR 4/4) moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and fine, few medium roots; common very fine and fine tubular pores; few thin clay films on faces of peds and lining pores; 10 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

2Bk--13 to 17 inches; light yellowish brown (10YR 6/4) gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, nonsticky and nonplastic; many very fine and fine, few medium roots; common very fine and fine tubular pores; 20 percent pebbles; few fine soft masses of lime; slightly to violently effervescent; moderately alkaline (pH 8.3); clear smooth boundary.

2Bqk--17 to 28 inches; very pale brown (10YR 7/3) gravelly sandy loam, brown (10YR 5/3) moist; massive; hard, firm and brittle, nonsticky and nonplastic; few very fine and fine roots; few fine tubular pores; 15 percent pebbles and 25 percent durinodes; few fine soft masses of lime; violently effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

2B'k--28 to 60 inches; very pale brown (10YR 7/3) gravelly loamy sand, brown (10YR 5/3) moist; massive; soft, very friable, nonsticky and nonplastic; few very fine roots; few fine tubular pores; 30 percent pebbles; few fine soft masses of lime; strongly effervescent; strongly alkaline (pH 8.8).

Type location: Nye County, Nevada; approximately 1 mile north of Stonewall Pass and U.S. 95, about 1,200 feet east and 1,400 feet north of the southwest corner of section 22, T.6 S., R.43 E.; (37 degrees, 23 minutes, 59 seconds north latitude and 117 degrees, 08 minutes, 42 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 54 to 59 degrees F.

Depth to duric features: 10 to 24 inches.

Control section:

Clay content--18 to 27 percent

Rock fragments--5 to 15 percent mainly pebbles.

A horizons:

Value--6 or 7 dry, 3 through 5 moist.

Chroma--2 or 3.

Effervescence--Commonly noneffervescent, but is slightly effervescent in some pedons.

Reaction--Neutral to moderately alkaline.

Bt horizon:

Value--5 or 6 dry, 4 or 5 moist.

Chroma--2 through 4, dry or moist.

Structure--Columnar or subangular blocky.

Texture (less than 2 millimeters)--Fine sandy loam, loam or sandy clay loam.

Reaction--Moderately alkaline or strongly alkaline.

Effervescence--Usually noneffervescent, some pedons are slightly effervescent.

Consistence--Slightly hard to hard, very friable to firm, slightly sticky to sticky, nonplastic to plastic.

Bk and Bqk horizon:

Value--5 through 7 dry, 4 through 6 moist.

Chroma--2 through 4.

Durinodes--Hard and very hard dry, firm or very firm moist.

Reaction--Moderately alkaline to very strongly alkaline.

Rock fragments--10 to 30 percent mainly pebbles.

Other features--2Bk horizon is present in some pedons.

Silica cementation--Most pedons have 20 to 70 percent durinodes and may also have a continuous brittle matrix which is hard and very hard, firm or very firm.

Vindicator series

The Vindicator series consists of shallow and very shallow, well drained soils that formed in residuum and colluvium derived from volcanic rocks. Vindicator soils are on hills and mountains. Slopes are 2 to 50 percent. Mean annual precipitation is about 7 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, mesic, shallow Typic Haplargids

Typical pedon: Vindicator very gravelly sandy loam, in map unit 2710. (Colors are for dry soil unless otherwise noted.)

A--0 to 2 inches; pale brown (10YR 6/3) very gravelly sandy loam, brown (10YR 4/3) moist; moderate thin platy structure parting to moderate fine granular; soft, very friable, nonsticky and nonplastic; common very fine roots; many very fine and fine interstitial pores; 35 percent pebbles and 5 percent cobbles; strongly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

Bt--2 to 7 inches; light yellowish brown (10YR 6/4) very gravelly clay loam, brown (10YR 4/3) moist; moderate fine subangular blocky structure; soft, very friable, sticky and plastic; many very fine and fine roots; many very fine and fine interstitial pores; 40 percent pebbles and 5 percent cobbles; common thin clay films on faces of peds and lining pores; violently effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Cr--7 to 16 inches; soft tuffaceous rock; roots extend into numerous fractures.

Type location: Nye County, Nevada; approximately 4.5 miles northeast of Goldfield, about 2,200 feet east and 700 feet south of the northwest corner of section 28, T.2 S., R.43 E.; (37 degrees, 44 minutes, 28 seconds north latitude and 117 degrees, 09 minutes, 41 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring and for 10 to 20 days cumulative between July and October due do to convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to paralithic: 4 to 14 inches.

Reaction: Slightly alkaline or moderately alkaline.

Effervescence: Slightly effervescent to violently effervescent.

Control section:

Clay content--18 to 27 percent.

Rock fragments--35 to 50 percent, mainly pebbles.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Bt horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Texture (less than 2 millimeters)--Clay loam or loam.

Consistence--Soft or slightly hard, very friable or friable, nonplastic to plastic.

Other features--Normally contains 5 to 15 percent soft rock fragments that break down when shaken in water.

Wahguyhe series

The Wahguyhe series consists of shallow, somewhat excessively drained soils that formed in residuum and colluvium derived from volcanic rocks. Wahguyhe soils are on mountains. Slopes are 15 to 75 percent. Mean annual precipitation is about 11 inches and mean annual temperature is about 53 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, nonacid, mesic Lithic Xeric Torriorthents

Typical pedon: Wahguyhe very gravelly sandy loam, located in map unit 2320. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 60 percent pebbles and 2 percent cobbles.

A--0 to 2 inches; light yellowish brown (10YR 6/4) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; many fine vesicular pores; 36 percent pebbles; moderately alkaline (pH 8.0); clear wavy boundary.

C--2 to 16 inches; light yellowish brown (10YR 6/4) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; soft, very friable, slightly sticky and slightly plastic; many fine interstitial pores; 45 percent pebbles; moderately alkaline (pH 8.0); abrupt wavy boundary.

R--16 inches; rhyolite bedrock.

Type location: Nye County, Nevada; approximately 20 miles northwest of the town of Beatty, about 1,600 feet north and 2,000 feet west of the projected southeast corner of section 26, T.10 S., R.43 E.; (37 degrees, 02 minutes, 09 seconds north latitude and 117 degrees, 07 minutes, 09 seconds west longitude.)

Range in Characteristics:

Soil moisture: Moist in winter and spring months, dry in summer and fall except for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Depth to lithic contact: 14 to 20 inches.

Other features: Noneffervescent throughout the soil profile.

Control section:

Clay content--5 to 15 percent.

Rock fragments--35 to 60 percent mainly pebbles.

A horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

C horizon:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--3 or 4.

Structure--Subangular blocky, platy, or massive.

Wanomie series

The Wanomie series consists of moderately deep to a duripan, well drained soils formed in alluvium derived from mixed rocks. Wanomie soils are on alluvial flats. Slopes are 0 to 4 percent. Mean annual precipitation is about 8 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Coarse-loamy, mixed, superactive, thermic Cambidic Haplodurids

Typical pedon: Wanomie sandy loam, in map unit 2501. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 10 percent pebbles.

A--0 to 2 inches; very pale brown (10YR 7/4) sandy loam, yellowish brown (10YR 5/4) moist; weak coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and few fine roots; common very fine and fine interstitial

pores; 5 percent pebbles; violently effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

C--2 to 7 inches; light yellowish brown (10YR 6/4) sandy loam, yellowish brown (10YR 5/4) moist; moderate coarse subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and fine roots; common very fine and fine interstitial pores; 3 percent pebbles; violently effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

Cq--7 to 13 inches; very pale brown (10YR 8/3) sandy loam, light yellowish brown (10YR 6/4) moist; moderate medium platy structure; slightly hard, firm, nonsticky and nonplastic; common very fine, fine and medium roots; common very fine and fine interstitial pores; some plates weakly silica-cemented; violently effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

C'--13 to 19 inches; light yellowish brown (10YR 6/4) sandy loam, yellowish brown (10YR 5/4) moist; moderate coarse subangular blocky structure; slightly hard, friable, nonsticky and nonplastic; common fine and medium roots; common very fine and fine interstitial pores; 2 percent pebbles; violently effervescent; moderately alkaline (pH 8.2); abrupt wavy boundary.

C'q--19 to 25 inches; very pale brown (10YR 8/3) sandy loam, light yellowish brown (10YR 6/4) moist; strong medium platy structure; hard, very firm, nonsticky and nonplastic; common fine and medium roots; common very fine and fine interstitial pores; 2 percent pebbles; common pan fragments; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

C'--25 to 30 inches light yellowish brown (10YR 6/4) sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine and medium roots; common very fine and fine interstitial pores; 2 percent pebbles; slightly effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

2Cqkm--30 to 31 inches; strongly cemented duripan with discontinuous 1 millimeter laminar cap; massive.

2C'q--31 to 60 inches; light yellowish brown (10YR 6/4) coarse sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, firm, nonsticky and nonplastic; common fine roots; common very fine and fine interstitial pores; continuous weak silica cementation; 3 percent pebbles; violently effervescent; moderately alkaline (pH 8.2).

Type location: Nye County, Nevada; approximately 16 miles northwest of the town of Beatty, about 300 feet

west and 1,300 feet north of the projected southeast corner of section 26, T.9 S., R.45 E.; (37 degrees, 07 minutes, 20 seconds north latitude and 116 degrees, 53 minutes, 49 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, but moist in some horizon for short periods during winter and spring months, and for 10 to 20 days following summer convection storms.

Soil temperature: 65 to 67 degrees F.

Depth to duripan: 20 to 40 inches.

Reaction: Moderately alkaline or strongly alkaline.

Cementation: All profiles contain some pan fragments in a horizon above the duripan. Some profiles contain cemented masses or a few durinodes.

Control section:

Clay content--5 to 18 percent, average.

Rock fragments--0 to 10 percent.

A horizon:

Value--6 or 7 dry, 5 or 6 moist.

Chroma--3 or 4 dry, 4 or 5 moist.

C and Cq horizons:

Value--6 through 8 dry, 5 through 8 moist.

Chroma--2 through 4 dry, 3 through 6 moist.

Texture--Stratified loam, sandy loam, or coarse sandy loam.

Clay content--5 to 18 percent.

Rock fragments--0 to 10 percent.

Structure--Subangular blocky, platy, or massive.

Effervescence--Slightly effervescent or violently effervescent.

Cqkm horizon:

Other features--Discontinuous thin laminar cap 1 to 4 millimeter thick which grades to strongly cemented then weakly cemented layers below.

Rupture resistance--Weakly to strongly cemented.

Wardenot series

The Wardenot series consists of very deep, excessively drained soils that formed in alluvium derived from mixed rocks. Wardenot soils are on fan aprons and inset fans. Slopes are 0 to 8 percent. Mean annual precipitation is about 6 inches and the mean annual temperature is about 53 degrees F.

Taxonomic class: Sandy-skeletal, mixed, mesic Typic Torriorthents

Typical pedon: Wardenot gravelly sandy loam, in map unit 2650. (Colors are for dry soil unless otherwise noted.)

A1--0 to 5 inches; pale brown (10YR 6/3) gravelly sandy loam, dark brown (10YR 4/3) moist; weak thick platy structure; soft, very friable, slightly sticky and nonplastic; many very fine and fine, vesicular pores; 30 percent pebbles; slightly effervescent; moderately alkaline (pH 8.4); abrupt smooth boundary.

A2--5 to 7 inches; pale brown (10YR 6/3) very gravelly sandy loam, dark brown (10YR 4/3) moist; weak fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and nonplastic; many very fine and few fine roots; many very fine and fine vesicular and few very fine interstitial pores; 35 percent pebbles; slightly effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

A3--7 to 14 inches; pale brown (10YR 6/3) very gravelly loamy sand, dark brown (10YR 4/3) moist; single grain; loose, nonsticky and nonplastic; many very fine and fine roots; many fine interstitial and common very fine interstitial pores; 50 percent pebbles; strongly effervescent; strongly alkaline (pH 8.6); clear smooth boundary.

Bqk--14 to 19 inches; pale brown (10YR 6/3) very gravelly sandy loam, dark brown (10YR 4/3) moist; massive; soft, very friable, nonsticky and nonplastic; many very fine and fine and common medium roots; common fine interstitial and tubular pores; 55 percent pebbles, common lime and silica coating on underside of pebbles; strongly effervescent; moderately alkaline (pH 8.2); clear wavy boundary.

Bk--19 to 60 inches; light yellowish brown (10YR 6/4) stratified extremely gravelly loamy sand and very gravelly sandy loam, dark brown (10YR 4/3); moist; single grain; loose, nonsticky and nonplastic; common very fine roots; few fine interstitial and tubular pores; 65 percent pebbles and 10 percent cobbles, common fine soft lime coating on underside of rock fragments; strongly effervescent; moderately alkaline (pH 8.4).

Type location: Nye County, Nevada; approximately 2 miles east of Ralston Mining Compound, north of the Stonewall Mountains, about 600 feet north and 700 feet west of the projected southeast corner of section 26, T.4 S., R.43 E.; (37 degrees, 33 minutes, 33 seconds north latitude and 117 degrees, 07 minutes, 06 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 53 to 59 degrees F.

Reaction: Slightly alkaline to strongly alkaline, commonly increases with depth.

Control section:

Rock fragments--40 to 75 percent; includes cobbles and stones.

A horizons:

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 or 3.

Effervescence--Noneffervescent to strongly effervescent, may be violently effervescent in spots when influenced by eolian depositions.

Bqk and Bk horizons:

Value--5 through 7 dry, 3 through 5 moist.

Chroma--2 through 4.

Structure--Single grain or massive.

Texture (less than 2 millimeters)--Stratified very gravelly fine sandy loam to extremely cobbly loamy sand. Strata of very gravelly or cobbly sandy loam or fine sandy loam are always present in upper part of substratum. Average texture loamy sand.

Rock fragments--40 to 75 percent average; individual strata may have as little as 25 percent rock fragments.

Lime and silica--Lime and silica pendants commonly are present in some part of the B horizon.

Effervescence--Strongly effervescent or violently effervescent.

Wechech series

The Wechech series consists of very shallow and shallow over a petrocalcic, well drained soils that formed in alluvium derived from limestone and dolomite.

Wechech soils are on fan piedmonts. Slopes are 2 to 8 percent. The mean annual precipitation is about 6 inches and the mean annual air temperature is about 63 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, thermic, shallow Calcic Petrocalcids

Typical pedon: Wechech very gravelly sandy loam, located in map unit 230 of the adjacent Clark County

area, Nevada, soil survey. (Colors are for dry soil unless otherwise noted). The soil surface is partially covered with approximately 40 percent pebbles and 5 percent cobbles.

A--0 to 2 inches; very pale brown (10YR 7/4) very gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; strong medium platy structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine and fine vesicular pores; 40 percent pebbles and 5 percent cobbles; violently effervescent; strongly alkaline (pH 8.6); abrupt smooth boundary.

Bk1--2 to 7 inches; light yellowish brown (10YR 6/4) very gravelly sandy loam, dark yellowish brown (10YR 4/6) moist; moderate fine and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; many very fine and fine interstitial and common fine tubular pores; few very thin lime coats on undersides of rock fragments; 35 percent pebbles; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Bk2--7 to 13 inches; light brown (7.5YR 6/4) very gravelly sandy loam, brown (7.5YR 5/4) moist; massive; hard, friable, slightly sticky and nonplastic; common medium and few very fine roots; common very fine and few fine interstitial and few fine and medium tubular pores; 50 percent pebbles and 5 percent cobbles; common moderately thick lime coats on rock fragments; 40 percent secondary calcium carbonate occurring as concretions and soft masses; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

Bkm--13 to 60 inches; white (10YR 8/2) carbonate indurated petrocalcic hardpan, very pale brown (10YR 7/3) moist; massive; extremely hard, extremely firm, brittle; 1/4 inch continuous carbonate laminae; alternating indurated and strongly lime cemented plates in the lower part; violently effervescent.

Type location: Clark County, Nevada; approximately 1.5 miles south of Whitney Pocket along the Gold Butte Road; about 800 feet south and 600 feet west of the northeast corner of section 34, T.16 S., R.70 E.; (36 degrees, 30 minutes, 15 seconds north latitude and 114 degrees, 08 minutes, 57 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring and for 10 to

20 days cumulative between July and October following convection storms.

Soil temperature: 59 to 71 degrees F.

Depth to petrocalcic horizon: 8 to 14 inches.

Control section:

Percent clay--10 to 18 percent.

Rock fragments--Averages 35 to 60 percent.

Calcium carbonate equivalent--40 to 60 percent by weight in the less than 20 millimeter fraction.

A horizon:

Hue--5YR, 7.5YR, or 10YR.

Value--5 through 7 dry, 3 through 5 moist.

Chroma--2 through 4.

Bk horizons:

Hue--7.5YR, or 10YR.

Value--5 through 8 dry, 4 through 7 moist.

Chroma--2 through 6.

Texture of the fine earth--Sandy loam or fine sandy loam.

Consistence--Soft through hard, nonplastic or slightly plastic.

Structure--Massive or subangular blocky

Bkm horizon:

Hue--5YR, 7.5YR, or 10YR.

Value--7 or 8 dry, 6 or 7 moist.

Chroma--2 through 4.

Structure--Massive or platy

Other features--Continuously lime indurated in the upper part with strongly cemented layers or lenses occurring throughout the lower part.

Weiser series

The Weiser series consists of very deep, well drained soils that formed in alluvium derived from limestone and dolomite. Weiser soils are on erosional fan remnants. Slopes are 2 to 8 percent. Mean annual precipitation is about 5 inches and mean annual temperature is about 64 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, thermic Typic Haplocalcids

Typical pedon: Weiser very gravelly sandy loam, in map unit 2020. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with an erosion pavement of 30 percent pebbles and 10 percent cobbles. Most of these have desert varnish on exposed portions.

A--0 to 2 inches; pink (7.5YR 7/4) very gravelly sandy loam, brown (7.5YR 4/4) moist; weak thick platy

structure that parts with slight pressure to weak medium and fine subangular blocky and fine granular; slightly hard, very friable, nonsticky and nonplastic; few fine roots; many fine and medium vesicular pores; 30 percent pebbles and 10 percent cobbles; violently effervescent; moderately alkaline (pH 8.4) abrupt smooth boundary.

Bw--2 to 6 inches; pink (7.5YR 7/4) very gravelly sandy loam, brown (7.5YR 5/4) moist; weak medium and fine granular structure; soft, very friable, slightly sticky and slightly plastic; few fine roots; many very fine interstitial, and few fine tubular pores; 35 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk1--6 to 14 inches; pink (7.5YR 7/4) very gravelly fine sandy loam, brown (7.5YR 5/4) moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; few very fine and fine roots; many very fine interstitial pores; 50 percent pebbles and 5 percent cobbles; common white (10YR 8/2) lime nodules and many of the rock fragments are lime coated; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk2--14 to 20 inches; pink (7.5YR 7/4) extremely gravelly fine sandy loam, brown (7.5YR 5/4) moist; massive; slightly hard, very friable, slightly sticky and nonplastic; few very fine and fine roots; many very fine and fine interstitial pores; 65 percent pebbles and 15 percent cobbles that have many 1/8 to 1/3 inch pinkish white (7.5YR 8/2) lime crusts, and some lime nodules and crevice fillings between pebbles; violently effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

C--20 to 60 inches; pink (7.5YR 7/4) extremely gravelly sandy loam, brown (7.5YR 5/4) moist; massive; slightly hard, very friable, nonsticky, and nonplastic; few very fine and fine roots; many very fine and fine interstitial pores; 60 percent pebbles and 10 percent cobbles; violently effervescent; moderately alkaline (pH 8.4).

Type location: Nye County Nevada; about 700 feet south and 1,000 feet east of the northwest corner of section 14, T.16 S., R.52 E.; (36 degrees, 33 minutes, 55 seconds north latitude and 116 degrees, 16 minutes, 12 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry. Moist for short periods throughout the moisture control section December through March, moist above and periodically in upper part of moisture control section for 10 to 20 days, cumulative July through October following convection storms.

Soil temperature: 63 to 69 degrees F.

Depth to the calcic horizon: 5 to 15 inches.

Thickness of calcic horizon: 10 to 28 inches.

Reaction: Moderately alkaline or strongly alkaline.

Calcium carbonate equivalent: 40 to 60 percent.

Control section:

Clay content--5 to 18 percent.

Rock fragments--50 to 85 percent, with 0 to 15 percent stones and 0 to 25 percent cobbles.

A horizon:

Hue--7.5YR or 10YR.

Value--6 or 7 dry, 4 or 5 moist.

Chroma--2 through 4.

Bw and Bk horizons:

Hue--7.5YR or 10YR.

Value--6 through 8 dry, 5 or 6 moist.

Chroma--2 through 4.

Texture--Stratified very gravelly fine sandy loam to extremely gravelly sandy loam.

C horizon:

Hue--7.5YR or 10YR

Value--6 or 7 dry.

Chroma--2 through 4.

Texture--Stratified very gravelly fine sandy loam to extremely gravelly sandy loam.

Consistence--Very friable or friable, nonplastic or slightly plastic.

Wilst series

The Wilst series consists of moderately deep well drained soils that formed in alluvium derived from mixed rocks over tuff bedrock. Wilst soils are on rock pediment remnants. Slopes are 4 to 8 percent. Mean annual precipitation is about 9 inches and mean annual temperature is about 62 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, thermic Duric Torriorthents

Typical pedon: Wilst very gravelly sandy loam, in map unit 2421. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 50 percent pebble-size pan fragments and 3 percent cobble-size pan fragments.

A--0 to 4 inches; pale brown (10YR 6/3) very gravelly sandy loam, brown (10YR 5/3) moist; strong thin and medium platy structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine and few medium roots; many very fine and fine tubular pores;

40 percent pebbles; violently effervescent; moderately alkaline (pH 8.2); abrupt broken boundary.

Bqk--4 to 10 inches; very pale brown (10YR 7/3) gravelly sandy loam, brown (10YR 5/3) moist; strong very thick platy structure; hard, firm and brittle, nonsticky and nonplastic; few fine medium and coarse roots; few very fine tubular pores; 15 percent pebbles; 80 percent hard silica and lime cemented plates; few thin lime and silica pendants on undersides of pebbles; violently effervescent; moderately alkaline (pH 8.2); abrupt broken boundary.

Bk--10 to 20 inches; light yellowish brown (10YR 6/4) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable, nonsticky and slightly plastic; few very fine, fine and medium roots; few very fine tubular pores; 45 percent pebbles; common thick lime coats on undersides of pebbles; common pan fragments; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

Bqk'--20 to 21 inches; very pale brown (10YR 7/3) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; strong very thick platy structure; hard, firm and brittle, nonsticky and nonplastic; few very fine roots between plates; few very fine tubular pores; 50 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); abrupt broken boundary.

Bk'--21 to 33 inches; light yellowish brown (10YR 6/4) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; massive; slightly hard, friable; nonsticky and slightly plastic; few very fine and common fine and medium roots; few very fine tubular pores; 50 percent pebbles; common thin lime coats on undersides of pebbles; violently effervescent; moderately alkaline (pH 8.2); abrupt smooth boundary.

R--33 inches; hard tuffaceous bedrock.

Type location: Nye County, Nevada; approximately 6.5 miles northeast of Beatty, about 1,000 feet east and 100 feet south of the northwest corner of section 18, T.11 S., R.48 E.; (36 degrees, 59 minutes, 17 seconds north latitude and 116 degrees, 39 minutes, 26 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods of time in winter and spring and for short intermittent periods following summer convection storms.

Soil temperature: 59 to 64 degrees F.

Depth to bedrock: 20 to 40 inches.

Depth to weakly cemented layer: 3 to 10 inches.

Control section:

Clay content--8 to 15 percent.

Rock fragments--35 to 55 percent.

A horizon:

Value--5 through 7, dry or moist.

Chroma--3 or 4.

Reaction--Moderately alkaline or strongly alkaline.

Other features--Surface of some pedons is covered with white pan fragments.

Bqk horizon:

Value--5 through 7, dry or moist.

Chroma--3 or 4.

Texture of fine earth--Coarse sandy loam or sandy loam

Other features--Some plates are rotationally displaced allowing roots to penetrate.

Bk horizons:

Value--5 through 7, dry or moist.

Chroma--3 or 4.

Texture of fine earth--Sandy loam, coarse sandy loam.

Woda series

The Woda series consists of shallow to a petrocalcic well drained soils, that formed in alluvium derived from limestone and re-worked lacustrine deposits. Woda soils are on fan remnants. Slopes are 2 to 15 percent. Mean annual precipitation is about 6 inches and mean annual temperature is about 64 degrees F.

Taxonomic class: Loamy, carbonatic, thermic, shallow Calcic Petrocalcids

Typical pedon: Woda sandy loam, in map unit 2051. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with 30 percent pebbles consisting mainly of thin pan fragments.

A1--0 to 1 inch; very pale brown (10YR 8/3) sandy loam, light yellowish brown (10YR 6/4) moist; moderate medium platy structure; soft, friable, nonsticky and nonplastic; few very fine roots; common very fine and fine vesicular pores; 10 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4) clear wavy boundary.

A2--1 to 10 inches; very pale brown (10YR 8/3) sandy loam, light yellowish brown (10YR 6/4) moist; moderate medium subangular blocky structure; soft, very friable, nonsticky and nonplastic; common very fine, fine and medium roots; common very fine and fine interstitial pores; 5 percent pebbles; strongly effervescent; moderately alkaline (pH 8.4); clear wavy boundary.

Bk--10 to 18 inches; white (10YR 8/1) gravelly clay loam, light yellowish brown (10YR 6/4) moist; massive; hard, friable, slightly sticky and plastic; common very fine, fine and medium roots; 20 percent pebbles; common soft lime masses throughout horizon; violently effervescent; strongly alkaline (pH 9.0); abrupt, smooth boundary.

Bkm--18 to 60 inches, white (10YR 8/1) indurated petrocalcic horizon.

Type location: Nye County, Nevada; approximately 7 miles southeast of Amargosa Valley, about 1,600 feet north and 500 feet west of the southeast corner of section 25, T.16 S., R.50 E.; (36 degrees, 31 minutes, 42 seconds north latitude and 116 degrees, 17 minutes, 35 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods winter and spring months and for 10 to 20 days from July through October following summer convection storms.

Soil temperature: 62 to 67 degrees F.

Depth to petrocalcic horizon: 6 to 20 inches.

Calcium carbonate equivalent: 40 to 60 percent.

Reaction: Moderately alkaline to very strongly alkaline.

Effervescence: Strongly effervescent or violently effervescent.

Other features: In some areas, a thin mantle of wind deposited sand is on the soil surface.

Control section:

Clay content--20 to 30.

Rock fragments--15 to 30 percent, mainly pebbles.

A horizons:

Value--7 or 8 dry.

Chroma--2 or 3 dry.

Bk horizon:

Value--5 through 7 moist.

Chroma--3 or 4 moist.

Texture--Loam or clay loam.

Clay content--20 to 30 percent.

Bkm horizon:

Thickness--4 to 15 feet.

Rupture resistance--Very strongly cemented to indurated.

Wodavar series

The Wodavar series consists of shallow to a hardpan, well drained soils that formed in residuum from

lacustrine sediments. Wodavar soils are on lake terraces and alluvial flats. Slopes are 0 to 8 percent. The mean annual precipitation is about 6 inches and the mean annual air temperature is about 60 degrees F.

Taxonomic class: Loamy-skeletal, carbonatic, thermic, shallow Calcic Petrocalcids

Typical pedon: Wodavar extremely gravelly fine sandy loam, livestock grazing and wildlife habitat. (Colors are for dry soil unless otherwise noted.) The surface is partially covered by approximately 65 percent pebble-size pan fragments.

A--0 to 3 inches; very pale brown (10YR 7/3) extremely gravelly fine sandy loam, yellowish brown (10YR 5/4) moist; moderate medium and thick platy structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine and few fine vesicular and interstitial pores; 65 percent pebble-size pan fragments; violently effervescent; moderately alkaline (pH 8.4); clear smooth boundary.

Bk--3 to 16 inches; pale brown (10YR 6/3) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; slightly hard, very friable, nonsticky and slightly plastic; many very fine, few fine and medium roots; common very fine and few fine interstitial pores; 40 percent pebble-size lime nodules; violently effervescent; very strongly alkaline (pH 9.2); clear wavy boundary.

Bkqm1--16 to 22 inches; white (10YR 8/1) very strongly cemented petrocalcic horizon, very pale brown (10YR 7/3) moist; moderate very thick platy structure; very rigid, rigid, very strongly cemented; common very fine and few fine and medium roots in fractures; common very fine and few fine tubular pores; violently effervescent; strongly alkaline (pH 8.8); clear wavy boundary.

Bkqm2--22 to 33 inches; white (10YR 8/1) continuously indurated petrocalcic horizon, pale brown (10YR 6/3) moist; massive; very rigid, indurated; few very fine and fine tubular pores; violently effervescent; strongly alkaline (pH 8.6); clear wavy boundary.

Bkq--33 to 60 inches; white (10YR 8/1) very gravelly loam, pale brown (10YR 6/3) moist; massive; moderately hard, friable, slightly sticky and slightly plastic; few very fine and fine tubular pores; 60 percent pebble-size lime nodules that are very rigid, rigid, strongly cemented; violently effervescent; strongly alkaline (pH 8.6).

Type location: Clark County, Nevada; approximately 0.6 miles east of Stump Spring in the southeast end of Pahrump Valley; about 150 feet south and 100 feet west of the northeast corner of section 5, T. 23 S., R.

55 E.; (35 degrees, 59 minutes, 01 seconds north latitude and 115 degrees, 48 minutes, 52 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring and for 10 to 20 days cumulative between July to October following convection storms. Has a typic-aridic moisture regime.

Soil temperature: 59 to 65 degrees F.

Depth to calcic horizon: 2 to 6 inches.

Depth to hardpan: 10 to 20 inches.

Control section:

Percent clay--8 to 16 percent.

Rock fragments--Averages 35 to 60 percent, composed mainly of lime nodules.

Bk horizon:

Rock fragments--35 to 60 percent, rigid to indurated lime nodules.

Calcium carbonate equivalent--25 to 40 percent of the less than 2 millimeter fraction. 40 to 80 percent of less than 20 millimeter fraction.

Secondary carbonates--Identifiable secondary carbonates as nodules, concretion or soft masses.

Other features--Secondary gypsum as few or common fine segregations and crystals are in some pedons.

Bkqm horizons:

Rupture resistance--Indurated or very strongly cemented.

Bkq horizon:

Clay content--10 to 18 percent.

Rock fragments--35 to 60 percent, rigid through indurated lime nodules.

Calcium carbonate equivalent--40 to 60 percent of the less than 2 millimeter fraction.

Yermo series

The Yermo series consists of deep, well drained soils that formed in alluvium derived from mixed rocks. Yermo soils are on alluvial fans. Slopes are 5 to 30 percent. Mean annual precipitation is about 5 inches and mean annual air temperature is about 62 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, calcareous, thermic Typic Torriorthents

Typical pedon: Yermo very gravelly sandy loam, in map unit 2162. (Colors are for dry soil unless otherwise noted.)

A--0 to 6 inches; brown (10YR 5/3) very gravelly sandy loam, dark grayish brown (10YR 4/2) moist; massive; soft, very friable, slightly sticky and slightly plastic; common very fine and fine roots; few fine vesicular and common very fine interstitial pores; 35 percent pebbles and 5 percent cobbles; slightly effervescent; moderately alkaline (pH 8.2); clear smooth boundary.

C--6 to 60 inches; pale brown (10YR 6/3) very gravelly sandy loam, brown (10YR 5/3) moist; massive; soft, very friable, slightly sticky and slightly plastic; common very fine and fine roots; many very fine and fine interstitial pores; 45 percent pebbles and 10 percent cobbles; strongly effervescent; moderately alkaline (pH 8.4).

Type location: Nye County Nevada; about 2,000 feet south and 2,300 feet west of the northeast corner of section 35, T.16 S., R.51 E.; (36 degrees, 31 minutes, 05 seconds north latitude and 116 degrees, 12 minutes, 23 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist in some part for short periods during winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 59 to 61 degrees F.

Reaction: Moderately alkaline or strongly alkaline.

Effervescence: Slightly effervescent to violently effervescent.

Control section:

Clay content--8 to 18 percent.

Rock fragments--35 to 60 percent.

A horizon:

Value--5 or 6 dry.

Chroma--3 or 4, dry.

C horizon:

Value--6 or 7 dry.

Chroma--2 or 3.

Texture (less than 2 millimeters)--Sandy loam or loam.

Rock fragments--35 to 60 percent.

Yurm series

The Yurm series consists of shallow to a lime cemented hardpan, well drained soils formed in alluvium derived from quartzite and limestone. Yurm soils are on fan piedmonts. Slopes are 0 to 8 percent. Mean annual precipitation is about 4 inches and mean annual temperature is about 64 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic, shallow Calcic Petrocalcids

Typical pedon: Yurm very gravelly sandy loam, in map unit 2040. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 60 percent pebbles and 5 percent cobbles.

A1--0 to 1 inch; light gray (10YR 7/2) very gravelly sandy loam, brown (10YR 5/3) moist; weak fine granular structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; few very fine tubular pores; 55 percent pebbles; violently effervescent; moderately alkaline (pH 8.4); abrupt wavy boundary.

A2--1 to 3 inches; light gray (10YR 7/2) gravelly loam, pale brown (10YR 6/3) moist; strong medium platy structure; slightly hard, friable, slightly sticky and slightly plastic; few very fine roots; many very fine vesicular pores; 25 percent pebbles; violently effervescent; strongly alkaline (pH 8.5); clear wavy boundary.

Bk1--3 to 12 inches; light yellowish brown (10YR 6/4) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; weak medium subangular blocky structure; slightly hard, firm, slightly sticky and slightly plastic; many very fine and common fine roots; few very fine interstitial pores; 40 percent pebbles and pan fragments; coarse fragments coated with lime; violently effervescent; strongly alkaline (pH 8.5); clear wavy boundary.

Bk2--12 to 16 inches; very pale brown (10YR 7/4) very gravelly sandy loam, light yellowish brown (10YR 6/4) moist; massive; slightly hard, firm, slightly sticky and slightly plastic; many very fine, common fine and medium roots; few very fine interstitial and tubular pores; 50 percent pebbles and pan fragments; coarse fragments are coated with lime; violently effervescent; strongly alkaline (pH 8.5); abrupt wavy boundary.

Bkm--16 to 60 inches; white (10YR 8/1) gravelly strongly cemented petrocalcic horizon with accessory silica, white (10YR 8/2) moist; massive; very hard; violently effervescent.

Type location: Nye County, Nevada; approximately 5 miles south of the town of Mercury, about 2,600 feet south and 2,600 feet east of the northwest corner of section 1, T.16 S., R.53 E.; (36 degrees, 35 minutes, 23 seconds north latitude and 115 degrees, 58 minutes, 09 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods during winter and spring months and for 10 to 20 days

cumulative from July through September following summer convection storms.

Soil temperature: 64 to 70 degrees F.

Depth to petrocalcic horizon: 10 to 20 inches.

Control section:

Clay content--5 to 15 percent.

Rock fragments--Averages 35 to 50 by volume.

A horizons:

Value--6 or 7 dry; 4 through 6 moist.

Chroma--2 through 4 dry or moist.

Bk horizons:

Value--6, through 8 dry; 5 through 8 moist.

Chroma--3 or 4 dry or moist.

Texture of fine earth--Fine sandy loam or sandy loam.

Structure--Subangular blocky or massive.

Reaction--Moderately alkaline or strongly alkaline.

Other features--Some pedons contain pan fragments.

Bkm horizon:

Rupture resistance--Very strongly cemented or indurated.

Thickness--3 to 10 feet.

Zalda series

The Zalda series consists of well drained soils that are shallow over a duripan, well drained soils that formed in residuum derived from volcanic rocks, with a component of eolian material. Zalda soils are hills. Slopes are 2 to 30 percent. Mean annual precipitation is about 5 inches and mean annual temperature is about 63 degrees F.

Taxonomic class: Loamy, mixed, superactive, thermic, shallow Typic Haplodurids

Typical pedon: Zalda gravelly sandy loam, in map unit 2012. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 40 percent pebbles and 2 percent cobbles.

A1--0 to 3 inches; pale brown (10YR 6/3) gravelly sandy loam, brown (10YR 5/3) moist; weak fine platy structure; soft, very friable, nonsticky and nonplastic; few very fine roots; common very fine and fine interstitial and tubular pores; 15 percent pebbles; moderately alkaline (pH 8.2); gradual wavy boundary.

A2--3 to 7 inches; very pale brown (10YR 7/3) loam, brown (10YR 4/3) moist; moderate medium and thick platy structure; soft, very friable, nonsticky and

nonplastic; few very fine roots; many very fine and fine vesicular, common very fine and fine interstitial pores; violently effervescent; strongly alkaline (pH 8.6); abrupt wavy boundary.

Bqkm--7 to 8 inches; extremely hard lime-silica hardpan with an indurated laminar cap 3 to 5 millimeters thick; abrupt wavy boundary.

R--8 inches; basalt.

Type location: Nye County, Nevada; about 750 feet west and 200 feet north of the southeast corner of section 31, T.13 S., R.49 E.; (36 degrees, 46 minutes, 21 seconds north latitude and 116 degrees, 29 minutes, 40 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, moist for short periods of time in the late winter and early spring and for 10 to 20 days from July through mid October following summer convection storms.

Soil temperature: 62 to 67 degrees F.

Depth to duripan: 7 to 14 inches.

Depth to bedrock: 8 to 15 inches

Other features: Some pedons contain a thin Bw horizon that is slightly effervescent.

Control section:

Clay content--6 to 18 percent.

Rock fragments--5 to 25 percent.

Texture of fine earth--Fine sandy loam, sandy loam, or loam.

A horizons:

Value--6 or 7 dry, 4 through 6 moist.

Chroma--3 or 4.

Texture of fine earth--Fine sandy loam or loam.

Bqkm horizon:

Continuous laminar cap on unfractured bedrock.

Rupture resistance--Very strongly cemented to indurated.

Zibate series

The Zibate series consists of shallow, well drained soil that formed in residuum derived from volcanic rocks. Zibate soils are on hills. Slopes are 8 to 50 percent. Mean annual precipitation is about 11 inches and mean annual temperature is about 60 degrees F.

Taxonomic class: Loamy-skeletal, mixed, superactive, thermic Lithic Haplargids

Typical pedon: Zibate very gravelly sandy loam, in map unit 2431. (Colors are for dry soil unless otherwise

noted.) The soil surface is partially covered with approximately 45 percent pebbles and 5 percent cobbles.

A1--0 to 3 inches; pale brown (10YR 6/3) very gravelly sandy loam, yellowish brown (10YR 5/4) moist; weak fine and medium subangular blocky structure; soft, very friable, nonsticky and slightly plastic; common very fine and fine roots; few very fine tubular pores; 40 percent pebbles and 3 percent cobbles; moderately alkaline (pH 8.0); clear smooth boundary.

A2--3 to 6 inches; yellowish brown (10YR 5/4) extremely gravelly sandy loam, dark yellowish brown (10YR 4/4) moist; moderate fine and medium subangular blocky structure; slightly hard, friable, nonsticky and slightly plastic; common medium and coarse and few very coarse roots; common very fine and fine tubular pores; 45 percent pebbles and 20 percent cobbles; slightly alkaline (pH 7.8); clear smooth boundary.

Bt1--6 to 10 inches; brown (10YR 5/3) extremely gravelly loam, dark brown (10YR 4/3) moist; moderate fine and medium subangular blocky structure; hard, firm, slightly sticky and slightly plastic; common medium and coarse, and few very coarse roots; common very fine and fine tubular pores; common thick clay films on faces of peds and coating rock fragments; 55 percent pebbles and 10 percent cobbles; slightly alkaline (pH 7.6); clear smooth boundary.

Bt2--10 to 19 inches; brown (10YR 5/3) extremely gravelly loam, dark brown (10YR 4/3) moist; moderate fine and medium subangular blocky structure; hard; firm, slightly sticky and slightly plastic; common medium and coarse roots; common fine and medium interstitial pores; common thick clay films on rock fragments; 65 percent pebbles and 10 percent cobbles; slightly alkaline (pH 7.6); abrupt broken boundary.

R--19 inches; hard fractured rhyolitic bedrock; common thin clay films in fractures.

Type location: Nye County, Nevada; approximately 2 miles east of Silicon Mine, about 2,375 feet west and 1,955 feet south of the projected northeast corner of section 21, T.11 S., R.48 E.; (36 degrees, 58 minutes, 05 seconds north latitude and 116 degrees, 36 minutes, 53 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, but moist in some part for short periods in the winter and early spring months and for 10 to 20 days cumulative between July and October due to convection storms.

Soil temperature: 59 to 64 degrees F.

Depth to bedrock: 14 to 20 inches.

Effervescence: Noneffervescent to strongly effervescent.

A horizons:

Hue--10YR or 7.5YR.

Value--3 through 6 dry, 3 through 5 moist.

Chroma--3 or 4.

Reaction--Slightly alkaline to strongly alkaline.

Bt horizons:

Hue--10YR or 7.5YR.

Value--3 through 5 dry or moist.

Chroma--3 or 4.

Texture of fine earth--Averages loam or clay loam.

Clay content--18 to 35 percent.

Rock fragments--60 to 85 percent.

Structure--Subangular blocky or horizon is massive.

Consistence--Soft through hard dry, very friable through firm moist.

Reaction--Slightly alkaline or moderately alkaline.

Zyplar series

The Zyplar series consists of shallow and very shallow, well-drained soils that formed in residuum derived from tuffaceous rocks. Zyplar soils are on pediments. Slopes are 8 to 50 percent. The mean annual precipitation is about 6 inches and the mean annual temperature is about 56 degrees F.

Taxonomic class: Loamy, mixed, superactive, thermic Lithic Haplargids

Typical pedon: Zyplar very stony sandy loam, in map unit 2004. (Colors are for dry soil unless otherwise noted.) The soil surface is partially covered with approximately 40 percent pebbles, 10 percent cobbles, and 5 percent stones.

A--0 to 7 inches; yellowish brown (10YR 5/4) very stony sandy loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; soft, very friable, slightly sticky and slightly plastic; few very fine roots; common very fine and fine tubular pores; 15 percent pebbles and 5 percent stones; slightly alkaline (pH 7.8); gradual smooth boundary.

Bt--7 to 12 inches; yellowish brown (10YR 5/4) gravelly clay loam, dark yellowish brown (10YR 4/4) moist; weak fine and medium subangular blocky structure; slightly hard, friable, sticky and plastic; many very fine and fine, common medium roots; common very

fine, fine, and medium interstitial and few fine tubular pores; few thin clay films on faces of peds and lining pores; 30 percent pebbles; slightly effervescent; moderately alkaline (pH 8.0); abrupt wavy boundary. R--12 inches; hard tuffaceous bedrock, weathered in upper part.

Type location: Nye County, Nevada; approximately 5 miles east of Beatty, about 1,500 feet west and 1,500 feet south of the northeast corner of section 12, T.12 S., R.47 E.; (36 degrees, 54 minutes, 40 seconds north latitude and 116 degrees, 39 minutes, 58 seconds west longitude.)

Range in Characteristics:

Soil moisture: Usually dry, but moist in some part of the control section in January, February, and March. Moist for 10 to 20 days in some parts following summer convection storms.

Soil temperature: 59 to 65 degrees F.

Depth to bedrock: 8 to 14 inches.

Reaction: Slightly alkaline or moderately alkaline.

Control section:

Clay content--20 to 30 percent.

Rock fragments--15 to 35 percent, mainly pebbles.

A horizon:

Value--4 through 6 dry or moist.

Chroma--3 or 4.

Bt horizon:

Value--4 through 6 dry or moist.

Chroma--3 or 4.

Texture of fine earth--Sandy clay loam, loam or clay loam.

Clay content--25 to 35 percent.

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Glossary

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alkali (sodic) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Alluvial cone. The material washed down the sides of mountains and hills by ephemeral streams and deposited at the mouth of gorges in the form of a moderately steep, conical mass descending equally in all directions from the point of issue.

Alluvial fan. The fanlike deposit of a stream where it issues from a narrow valley upon a plain, or of a tributary stream near or at its junction with its main stream.

Alluvial flat. A nearly level, graded, alluvial surface in bolsons and semi-bolsons. Commonly, an alluvial flat does not manifest terraces or floodplain levels.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Alpha,alpha-dipridyl. A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Area reclaim (in tables). An area difficult to reclaim after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Argillite. Weakly metamorphosed mudstone or shale.

Arroyo. The flat-floored channel of an ephemeral stream, commonly with very steep to vertical banks cut in alluvium.

Aspect. The direction in which a slope faces.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity).

The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3.5
Low	3.5 to 5
Moderate	5 to 7.5
High	more than 7.5

Avalanche chute. The track or path formed by an avalanche.

Back slope. The geomorphic component that forms the steepest inclined surface and principal element of many hillsides. Back slopes in profile are commonly steep, are linear, and may or may not include cliff segments.

Backswamp. A floodplain landform of extensive, marshy, or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

Badland. Steep or very steep, commonly nonstony, barren land dissected by many intermittent drainage channels. Badland is most common in semiarid and arid regions where streams are entrenched in soft geologic material. Local relief generally ranges from 25 to 500 feet. Runoff potential is very high, and geologic erosion is active.

Ballena. A fan remnant having a distinctively-rounded surface of fan alluvium. The ballena's broadly rounded shoulders meet from either side to form a narrow summit and merge smoothly with concave, short pediments which form smoothly-rounded drainageways between adjacent ballenas. A partial ballena is a fan remnant large enough to retain some relict fan surface on a remnant summit.

Barrier beach. A wide gently sloping portion of a bolson floor comprising numerous, parallel, relict longshore-bars and lagoons built by a receding pluvial lake.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, K), expressed as a percentage of the total cation-exchange capacity.

Basin floor. A general term for the nearly level, lower-most part of intermontane basins (i.e., bolson, semi-bolsos). The basin floor includes all of the alluvial, eolian, and erosional landforms below the piedmont slope.

Beach terrace. The relict shorelines from pluvial lakes, generally restricted to valley sides.

Bedding planes. Fine strata, less than 5 millimeters thick, in unconsolidated alluvial, eolian, lacustrine, or marine sediment.

Bedding system. A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography. A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

Bench terrace. A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Blowout. A shallow depression from which all or most of the soil material has been removed by wind. A blowout has a flat or irregular floor formed by a

resistant layer or by an accumulation of pebbles or cobbles. In some blowouts, the water table is exposed.

Board foot. A unit of measure of the wood in lumber, logs, or trees. The amount of wood in a board one foot wide, one foot long, and one inch thick before finishing.

Bolson. A landscape term for an internally drained intermontane basin into which drainages from surrounding mountains converge inward toward a central depression.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breaks. The steep and very steep broken land at the border of an upland summit that is dissected by ravines.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Butte. An isolated small mountain or hill with steep or precipitous sides and a top variously flat, rounded, or pointed that may be a residual mass isolated by erosion or an exposed volcanic neck.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Caldera. A large, more or less circular depression, formed by explosion and/or collapse, which surrounds a volcanic vent or vents, and whose diameter is much greater than that of the included vent, or vents.

Caliche. A more or less cemented deposit of calcium carbonate in soils of warm-temperate, subhumid to arid areas. Caliche occurs as soft, thin layers in the soil or as hard, thick beds directly beneath the solum, or it is exposed at the surface by erosion.

California bearing ratio (CBR). The load-supporting capacity of a soil as compared to that of a standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Canyon. A long, deep, narrow, very steep sided valley with high, precipitous walls in an area of high local relief.

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channeled. Refers to a drainage area in which natural meandering or repeated branching and convergence of a streambed have created deeply incised cuts, either active or abandoned, in alluvial material.

Channery soil material. Soil material that is, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. Low-chroma zones having a low content of iron, manganese, and clay because of the chemical reduction of iron and manganese and the removal of iron, manganese, and clay. A type of redoximorphic depletion.

Clayey soil. Silty clay, sandy clay, or clay.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A slowly permeable soil horizon that contains much more clay than the horizons above it. A claypan

is commonly hard when dry and plastic or stiff when wet.

Clearcut. A method of forest harvesting that removes the entire stand of trees in one cutting. Reproduction is achieved artificially or by natural seeding from adjacent stands.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Closed depression. A low area completely surrounded by higher ground and having no natural outlet.

Coarse fragments. Mineral or rock particles larger than 2 millimeters in diameter.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded, partly rounded, or angular fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material. Material that is 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material is 35 to 60 percent of these rock fragments, and extremely cobbly soil material is more than 60 percent.

Codominant trees. Trees whose crowns form the general level of the forest canopy and that receive full light from above but comparatively little from the sides.

Colluvium. Unconsolidated, unsorted earth material moved and deposited by mass movement on sideslopes and at the base of slopes.

Commercial forest. Forest land capable of producing 20 cubic feet or more per acre per year at the culmination of mean annual increment.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Compressible (in tables). Excessive decrease in volume of soft soil under load.

Concretions. Cemented bodies with crude internal symmetry organized around a point, a line, or a plane that typically takes the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.

Conglomerate. A coarse grained, clastic rock composed of rounded to subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but, for many, it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Coprogenous earth (sedimentary peat). Fecal material deposited in water by aquatic organisms.

Corrosion. Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Cuesta. A hill or ridge that has a gentle slope on one side and a steep slope on the other; specifically, an asymmetric, homoclinal ridge capped by resistant rock layers of slight or moderate dip.

Culmination of the mean annual increment (CMAI).

The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Decreasers. The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

Deep soil. A soil that is 40 to 60 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

Delta. A body of alluvium having a surface that is nearly flat and fan shaped, deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

Dense layer (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Depth to rock (in tables). Bedrock is too near the surface for the specified use.

Desert pavement. On a desert surface, a layer of gravel or larger fragments that was emplaced by upward movement of the underlying sediments or that remains after finer particles have been removed by running water or the wind.

Dip slope. A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Divided-slope farming. A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

Dominant trees. Trees whose crowns form the general level of the forest canopy and that receive full light from above and from the sides.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized: excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. An area of ground at a lower elevation than the surrounding ground and in which water collects and is drained to a closed depression or lake or to a drainageway at a lower elevation. A drainageway may or may not have distinctly incised channels at its upper reaches or throughout its course.

Duff. A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Dune. A mound, ridge, or hill of loose, windblown granular material (generally sand), either bare or covered with vegetation.

Ecological Site. A distinctive kind of rangeland or grazed forestland that has a unique historic potential native plant community. Ecological sites are the products of all the environmental factors that affect their development. An ecological site is capable of supporting a native plant community that has a unique kind and/or proportion of species or total vegetative production. Ecological sites in grazed forestland include both overstory and understory vegetation.

Effervescence. The quality of a soil measured when drops of diluted (1:10) hydrochloric acid (HCL) are added to the soil. The ratings are as follows:

Very slightly effervescent.....	few bubbles
Slightly effervescent.....	bubbles readily
Strongly effervescent.....	bubbles form low foam
Violently effervescent.....	bubbles form thick foam quickly

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Eolian soil material. Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Erosion pavement. A layer of gravel or stones that remains on the surface after fine particles are removed by sheet or rill erosion.

Escarment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Synonym: scarp.

Even aged. Refers to a stand of trees in which only small differences in age occur between the individuals. A range of 20 years is allowed.

Excess alkali (in tables). Excess exchangeable sodium in

the soil. The resulting poor physical properties restrict the growth of plants.

Excess fines (in tables). Excess silt and clay in the soil. The soil does not provide a source of gravel or sand for construction purposes.

Excess lime (in tables). Excess carbonates in the soil that restrict the growth of some plants.

Excess salts (in tables). Excess water-soluble salts in the soil that restrict the growth of most plants.

Excess sodium (in tables). Excess exchangeable sodium in the soil. The resulting poor physical properties restrict the growth of plants.

Excess sulfur (in tables). Excessive amount of sulfur in the soil. The sulfur causes extreme acidity if the soil is drained, and the growth of most plants is restricted.

Extrusive rock. Igneous rock derived from deep-seated molten matter (magma) emplaced on the earth's surface.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fan apron. A sheet-like mantle of relatively young alluvium covering part of an older fan piedmont surface. It somewhere buries a soil that can be traced to the edge of the fan apron.

Fan piedmont. The most extensive landform on piedmont slopes, formed by the coalescence of alluvial fans or accretions of fan aprons into one generally smooth slope.

Fan remnant. A general term for landforms that are remaining parts of older fan-landforms, that either have been dissected or partially buried.

Fan skirt. The zone of smooth, laterally-coalescing, small alluvial fans that issue from gullies cut into the fan piedmont or that are the coalescing extensions of inset fans of the fan piedmont, and that merge with the basin floor.

Fast intake (in tables). The rapid movement of water into the soil.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the oven-dry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity*, *normal moisture capacity*, or *capillary capacity*.

Fill slope. A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

Fine textured soil. Sandy clay, silty clay, or clay.

Firebreak. An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of fire fighters and equipment. Designated roads also serve as firebreaks.

First bottom. The normal flood plain of a stream, subject to frequent or occasional flooding.

Flaggy soil material. Material that is, by volume, 15 to 35 percent flagstones. Very flaggy soil material is 35 to 60 percent flagstones, and extremely flaggy soil material is more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Fluvial. Of or pertaining to rivers; produced by river action, as a fluvial plain.

Foothill. A steeply sloping upland that has relief of as much as 1,000 feet (300 meters) and fringes a mountain range or high-plateau escarpment.

Foot slope. The inclined surface at the base of a hill.

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Fragile (in tables). A soil that is easily damaged by use or disturbance.

Frost action (in tables). Freezing and thawing of soil moisture. Frost action can damage roads, buildings and other structures, and plant roots.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Gilgai. The microrelief of clayey soils that shrink and swell considerably with changes in moisture content. Usually manifested as a succession of microbasins and microknolls in nearly level areas or of microvalleys and microridges parallel with the slope.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Graded stripcropping. Growing crops in strips that grade toward a protected waterway.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that is 15 to 50 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water. Water filling all the unblocked pores of underlying material below the water table.

Gully. A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Gypsum. A mineral consisting of hydrous calcium sulfate.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Heavy metal. Inorganic substances that are solid at ordinary temperatures and are not soluble in water. They form oxides and hydroxides that are basic. Examples are copper, iron, cadmium, zinc, manganese, lead, and arsenic.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.

Holocene. The epoch of the Quaternary Period of geologic time, extending from the end of the Pleistocene Epoch (about 10 to 12 thousand years ago) to the present.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. The major horizons of mineral soil are as follows:
O horizon.--An organic layer of fresh and decaying plant residue.

A horizon.--The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.--The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.--The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.--The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.--Soft, consolidated bedrock beneath the soil.

R layer.--Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind

of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Increasesers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasesers commonly are the shorter plants and less palatable to livestock.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Inset fan. A special case of the flood plain of an ephemeral stream that is confined between fan remnants, basin-floor remnants, ballenas, or closely opposed fan toeslopes.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2.....	very low
0.2 to 0.4.....	low
0.4 to 0.75.....	moderately low
0.75 to 1.25.....	moderate
1.25 to 1.75.....	moderately high
1.75 to 2.5.....	high
More than 2.5.....	very high

Intermittent stream. A stream, or reach of a stream, that flows for prolonged periods only when it receives groundwater discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Intermontane basin. A generic term for wide structural depressions between mountain ranges that are partly

filled with alluvium. They may be drained internally (bolsons) or externally (semi-bolsons).

Invaders. On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Iron depletions. Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.--Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.--Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes or borders.

Controlled flooding.--Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Corrugation.--Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).--Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.--Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Sprinkler.--Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.--Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding.--Water, released at high points, is allowed to flow onto an area without controlled distribution.

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lagoon. The nearly level, filled depression behind the longshore bar on a barrier beach.

Lake plain. A surface marking the floor of an extinct lake, filled in by well sorted, stratified sediments.

Lake terrace. The narrow shelf produced along a lake shore and later exposed when the water recedes.

Lamella. A thin, generally horizontal layer of fine material illuviated within a very much thicker, coarser, eluviated layer.

Landform. Any recognizable form or feature on the earth's surface, having a characteristic shape, and produced by natural causes that provide an empirical description of similar portions of the earth's surface.

Landscape. A collection of related, natural landforms.

Landslide. The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.

Large stones (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.

Leaching. The removal of soluble material from soil or other material by percolating water.

Liquid limit. The moisture content at which the soil passes from a plastic to a liquid state.

Loam. Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.

Loamy soil. Coarse sandy loam, sandy loam, fine sandy loam, very fine sandy loam, loam, silt loam, silt, clay loam, sandy clay loam, or silty clay loam.

Loess. Fine grained material, dominantly of silt-sized particles, deposited by wind.

Longshore bar. A narrow, elongate, coarse-textured ridge, built by the wave action of a pluvial lake, that extends parallel to the shore and separated it from a lagoon; both the bar and lagoon are now relict features.

Low-residue crops. Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.

Low strength. The soil is not strong enough to support loads.

Marl. An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal amounts.

Masses. Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.

Mean annual increment (MAI). The average annual increase in volume of a tree during the entire life of the tree.

Mechanical treatment. Use of mechanical equipment for seeding, brush management, and other management practices.

Medium textured soil. Very fine sandy loam, loam, silt loam, or silt.

Merchantable trees. Trees that are of sufficient size to be economically processed into wood products.

Metamorphic rock. Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.

Mineral soil. Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.

Minimum tillage. Only the tillage essential to crop production and prevention of soil damage.

Miscellaneous area. An area that has little or no natural soil and supports little or no vegetation.

Moderately coarse textured soil. Coarse sandy loam, sandy loam, or fine sandy loam.

Moderately deep soil. A soil that is 20 to 40 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Moderately fine textured soil. Clay loam, sandy clay loam, or silty clay loam.

Mollic epipedon. A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.

Morphology, soil. The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.

Mottling, soil. Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance--*few*, *common*, and *many*; size--*fine*, *medium*, and *coarse*; and contrast--*faint*, *distinct*, and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse*, more than 15 millimeters (about 0.6 inch).

Mountain. A natural elevation of the land surface, rising more than 1,000 feet above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range.

Muck. Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)

Mudstone. Sedimentary rock formed by induration of silt and clay in approximately equal amounts.

Munsell notation. A designation of color by degrees of three simple variables--hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Natric horizon. A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.

Neutral soil. A soil having a pH value between 6.6 and 7.3. (See Reaction, soil.)

Nodules. Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Observed rooting depth. Depth to which roots have been observed to penetrate.

Organic matter. Plant and animal residue in the soil in various stages of decomposition.

Overstory. The trees in a forest that form the upper crown cover.

Oxbow. The horseshoe-shaped channel of a former meander, remaining after the stream formed a cutoff across a narrow meander neck.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan*, *fragipan*, *claypan*, *plowpan*, and *traffic pan*.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Parna dune. An eolian dune built of sand size aggregates of clayey material that commonly occurs leeward of a playa.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pediment. A gently sloping erosional surface developed at the foot of a receding hill or mountain slope.

Pedisediment. A thin layer of alluvial material that mantles an erosion surface and has been transported to its present position from higher lying areas of the erosion surface.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The downward movement of water through the soil.

Percs slowly (in tables). The slow movement of water through the soil adversely affects the specified use.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Extremely slow.....	0.00 to 0.01 inch
Very slow.....	0.01 to 0.06 inch
Slow.....	0.06 to 0.2 inch
Moderately slow.....	0.2 to 0.6 inch
Moderate.....	0.6 inch to 2.0 inches
Moderately rapid.....	2.0 to 6.0 inches
Rapid.....	6.0 to 20 inches
Very rapid.....	more than 20 inches

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Piedmont slope. The dominant slope at the foot of a mountain. Main components of the piedmont slope include pediments, alluvial fans, fan piedmonts, fan skirts and inset fans.

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Pitting (in tables). Pits caused by melting around ice. They form on the soil after plant cover is removed.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plateau. An extensive upland mass with relatively flat summit area that is considerably elevated (more than 100 meters) above adjacent lowlands and separated from them on one or more sides by escarpments.

Playa. The generally dry and nearly level lake plain that occupies the lowest parts of closed depressional areas, such as those on intermontane basin floors. Temporary flooding occurs primarily in response to precipitation and runoff.

Pleistocene. The epoch of the Quaternary Period of geologic time preceding the Holocene (from approximately 2 million to 10 thousand years ago).

- Plowpan.** A compacted layer formed in the soil directly below the plowed layer.
- Pluvial.** Relating to former periods of abundant rains.
- Ponding.** Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.
- Poor filter** (in tables). Because of rapid or very rapid permeability, the soil may not adequately filter effluent from a waste disposal system.
- Poorly graded.** Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.
- Poor outlets** (in tables). Refers to areas where surface or subsurface drainage outlets are difficult or expensive to install.
- Potential native plant community.** See Climax plant community.
- Potential rooting depth (effective rooting depth).** Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.
- Prescribed burning.** Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.
- Productivity, soil.** The capability of a soil for producing a specified plant or sequence of plants under specific management.
- Profile, soil.** A vertical section of the soil extending through all its horizons and into the parent material.
- Proper grazing use.** Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.
- Quartzite, metamorphic.** Rock consisting mainly of quartz that formed through recrystallization of quartz-rich sandstone or chert.
- Quaternary.** The period of geologic time, extending from about 2 million years ago to the present and comprising two epochs, the Pleistocene (Ice Age) and Holocene (Recent).
- Quartzite, sedimentary.** Very hard but unmetamorphosed sandstone consisting chiefly of quartz grains.
- Range condition.** The present composition of the plant community on a range site in relation to the potential natural plant community for that site. Range condition

is expressed as excellent, good, fair, or poor on the basis of how much the present plant community has departed from the potential.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Range site. An area of rangeland where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. A range site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other range sites in kind or proportion of species or total production.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid.....	less than 3.5
Extremely acid.....	3.5 to 4.4
Very strongly acid.....	4.5 to 5.0
Strongly acid.....	5.1 to 5.5
Moderately acid.....	5.6 to 6.0
Slightly acid.....	6.1 to 6.5
Neutral.....	6.6 to 7.3
Slightly alkaline..... (mildly alkaline)	7.4 to 7.8
Moderately alkaline.....	7.9 to 8.4
Strongly alkaline.....	8.5 to 9.0
Very strongly alkaline.....	9.1 and higher

Redoximorphic concentrations. Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

Redoximorphic depletions. Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.

Redoximorphic features. Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.

Reduced matrix. A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.

Regeneration. The new growth of a natural plant community, developing from seed.

Regolith. The unconsolidated mantle of weathered rock and soil material on the earth's surface; the loose earth material above the solid rock.

Relict stream terrace. One of a series of platforms in or adjacent to a stream valley that formed prior to the current stream system.

Relief. The elevations or inequalities of a land surface, considered collectively.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.

Rill. A steep-sided channel resulting from accelerated erosion. A rill is generally a few inches deep and not wide enough to be an obstacle to farm machinery.

Riverwash. Unstable areas of sandy, silty, clayey, or gravelly sediments. These areas are flooded, washed, and reworked by rivers so frequently that they support little or no vegetation.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Rock outcrop. Exposures of bare bedrock other than lava flows and rock-lined pits.

Rooting depth (in tables). Shallow root zone. The soil is shallow over a layer that greatly restricts roots.

Root zone. The part of the soil that can be penetrated by plant roots.

Rubble land. Areas that have more than 90 percent of the surface covered by stones or boulders. Voids contain no soil material and virtually no vegetation other than lichens. The areas commonly are at the base of mountain slopes, but some are on mountain slopes as deposits of cobbles, stones, and boulders left by Pleistocene glaciation or by periglacial phenomena.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called groundwater runoff or seepage flow from ground water.

Saline soil. A soil containing soluble salts in an amount that impairs the growth of plants. A saline soil does not contain excess exchangeable sodium.

Salinity. The electrical conductivity of a saline soil. It is expressed, in millimhos per centimeter, as follows:

Nonsaline	0 to 2
Very slightly saline.....	2 to 4
Slightly saline	4 to 8

Moderately saline.....	8 to 16
Strongly saline.....	More than 16

Salty water (in tables). Water that is too salty for consumption by livestock.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sand sheet. A large, irregularly shaped, surficial mantle of eolian sand.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sandy soil. Sand or loamy sand.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saprolite. Unconsolidated residual material underlying the soil and grading to hard bedrock below.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Sawlogs. Logs of suitable size and quality for the production of lumber.

Scarification. The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

Scribner's log rule. A method of estimating the number of board feet that can be cut from a log of a given diameter and length.

Second bottom. The first terrace above the normal flood plain (or first bottom) of a river.

Sedimentary rock. Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.

Seepage (in tables). The movement of water through the soil. Seepage adversely affects the specified use.

Semi-bolson. An intermontane basin that is drained externally by an intermittent stream.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock formed by the hardening of a clay deposit.

Shallow soil. A soil that is 10 to 20 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shelterwood system. A forest management system requiring the removal of a stand in a series of cuts so that regeneration occurs under a partial canopy. After regeneration, a final cut removes the shelterwood and allows the stand to develop in the open as an even-aged stand. The system is well suited to sites where shelter is needed for regeneration, and it can aid regeneration of the more intolerant tree species in a stand.

Shoulder slope. The uppermost inclined surface at the top of a hillside. It is the transition zone from the back slope to the summit of a hill or mountain. The surface is dominantly convex in profile and erosional in origin.

Shrink-swell (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Shrub-coppice dune. A small dune that forms around shrubs or small trees.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. Sedimentary rock made up of dominantly silt-sized particles.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Sinkhole. A depression in the landscape where limestone has been dissolved.

Site class. A grouping of site indexes into five to seven production capability levels. Each level can be represented by a site curve.

Site curve (50-year). A set of related curves on a graph that shows the average height of dominant or dominant and codominant trees for the range of ages on soils that differ in productivity. Each level is represented by a curve. The basis of the curves is the height of dominant or dominant and codominant trees that are 50 years old or are 50 years old at breast height.

Site curve (100-year). A set of related curves on a graph that shows the average height of dominant or dominant and codominant trees for a range of ages on soils that differ in productivity. Each level is represented by a curve. The basis of the curves is the height of dominant or dominant and codominant trees that are 100 years old or are 100 years old at breast height.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Skid trails. Pathways along which logs are dragged to a common site for loading onto a logging truck.

Slash. The branches, bark, treetops, reject logs, and broken or uprooted trees left on the ground after logging.

Slickens. Accumulations of fine-textured material, such as material separated in placer-mine and ore-mill operations. Slickens from ore mills commonly consist of freshly ground rock that has undergone chemical treatment during the milling process.

Slickensides. Polished and grooved surfaces produced by one mass sliding past another. In soils, slickensides may occur at the bases of slip surfaces on the steeper slopes; on faces of blocks, prisms, and columns; and in swelling clayey soils, where there is marked change in moisture content.

Slick spot. A small area of soil having a puddled, crusted, or smooth surface and an excess of exchangeable sodium. The soil generally is silty or clayey, is slippery when wet, and is low in productivity.

Slippage (in tables). Soil mass susceptible to movement downslope when loaded, excavated, or wet.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, the following slope classes are recognized:

Nearly level	0 to 2 percent
Gently sloping	2 to 4 percent
Moderately sloping	4 to 8 percent
Strongly sloping	8 to 15 percent
Moderately steep	15 to 30 percent
Steep	30 to 50 percent
Very steep	50 to 75 percent
Extremely steep	75 percent and higher

Slope (in tables). Slope is great enough that special practices are required to ensure satisfactory performance of the soil for a specific use.

Slow intake (in tables). The slow movement of water into the soil.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Small stones (in tables). Rock fragments less than 3 inches (7.6 centimeters) in diameter. Small stones adversely affect the specified use of the soil.

Sodic (alkali) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Sodicity. The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of Na^+ to $\text{Ca}^{++} + \text{Mg}^{++}$. The degrees of sodicity and their respective ratios are:

Very slight	5-12:1
Slight	13-30:1
Moderate	31-45:1
Strong	46-90:1
Very strong	more than 90:1

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand	1.0 to 0.5
Medium sand	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt	0.05 to 0.002
Clay	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Species. A single, distinct kind of plant or animal having certain distinguishing characteristics.

Stone line. A concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Strath terrace. A surface cut formed by the erosion of hard or semiconsolidated bedrock and thinly mantled with stream deposits.

Stream channel. The hollow bed where a natural stream of surface water flows or may flow; the deepest or central part of the bed, formed by the main current and covered more or less continuously by water.

Stream terrace. One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel. It originally formed near the level of the stream and is the dissected remnants of an abandoned flood plain, streambed, or valley floor that were produced during a former stage of erosion or deposition.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to soil blowing and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are: *platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grain* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summer fallow. The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual

precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

Summit. A general term for the top, or highest level, of an upland feature, such as a hill or mountain. It commonly refers to a higher area that has a gentle slope and is flanked by steeper slopes.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer" or the "Ap horizon."

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Tailwater. The water directly downstream of a structure.

Talus. Fragments of rock and other soil material accumulated by gravity at the foot of cliffs or steep slopes.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field is generally built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). A step-like surface, ordinarily flat or undulating, bordering a river, a lake, or the sea representing a former flood plain.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand*, *loamy sand*, *sandy loam*, *loam*, *silt loam*, *silt*, *sandy clay loam*, *clay loam*, *silty clay loam*, *sandy clay*, *silty clay*, and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thin layer (in tables). Otherwise suitable soil material too thin for the specified use.

Till plain. An extensive area of nearly level to undulating soils underlain by glacial till.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toe slope. The outermost inclined surface at the base of a hill; part of a foot slope.

Too arid (in tables). The soil is dry most of the time, and vegetation is difficult to establish.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Toxicity (in tables). Excessive amount of toxic substances, such as sodium or sulfur, that severely hinder establishment of vegetation or severely restrict plant growth.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Trafficability. The degree to which a soil is capable of supporting vehicular traffic across a wide range in soil moisture conditions.

Tread. The relatively flat terrace surface that was cut or built by stream or wave action.

Tuff. A compacted deposit that is 50 percent or more volcanic ash and dust.

Understory. Any plants in a forest community that grow to a height of less than 5 feet.

Unstable fill (in tables). Risk of caving or sloughing on banks of fill material.

Upland (geology). Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Valley. An elongated depressional area primarily developed by stream action.

Valley fill. In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded streams.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Very deep soil. A soil that is more than 60 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Very shallow soil. A soil that is less than 10 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Waterspreading. Diverting runoff from natural channels by means of a system of dams, dikes, or ditches and spreading it over relatively flat surfaces.

Water supplying capacity. The total amount of water available in the soil for plant growth in a normal year from precipitation and from runoff from higher areas. Runoff and water lost to deep percolation are not included.

Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide

range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an oven-dry basis, at which a plant (specifically, a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

USDA United States
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Natural
Resources
Conservation
Service

In cooperation with
United States
Department of
Interior, Bureau of Land
Management; and
University of Nevada
Agricultural
Experiment Station

Soil Survey of Nye County, Nevada, Southwest Part Part II - Volume I

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Soil Survey of Nye County, Nevada, Southwest Part

This soil survey is an inventory and evaluation of the soils in the survey area. It can be used to adjust land uses to the limitations and potentials of natural resources and the environment. Also, it can help to prevent soil-related failures in land uses.

In preparing a soil survey, soil scientists, conservationists, engineers, and others collect extensive field data about the nature and behavioral characteristics of the soils. They collect data on erosion, droughtiness, flooding, and other factors that affect various soil uses and management. Field experience and collected data on soil properties and performance are used as a basis in predicting soil behavior.

Information in this section can be used to plan the use and management of soils for crops and pasture; as rangeland and woodland; as sites for buildings, sanitary facilities, highways and other transportation systems, and parks and other recreational facilities; and for wildlife habitat. It can be used to identify the potentials and limitations of each soil for specific land uses and to help prevent construction failures caused by unfavorable soil properties.

Interpretative ratings help engineers, planners, and others to understand how soil properties influence important nonagricultural uses, such as building site development and construction materials. The ratings

indicate the most restrictive soil features affecting the suitability of the soils for these uses.

Soils are rated in their natural state. No unusual modification of the soil site or material is made other than that which is considered normal practice for the rated use. Even though soils may have limitations, it is important to remember that engineers and others can modify soil features or can design or adjust the plans for a structure to compensate for most of the limitations. Many of these practices, however, are costly. The final decision in selecting a site for a particular use generally involves weighing the costs of site preparation and maintenance.

Planners and others using soil survey information can evaluate the effect of specific uses on productivity and on the environment in all or part of the survey area. The survey can help planners to maintain or create a land use pattern in harmony with the natural soil.

Contractors can use this survey to locate sources of sand and gravel, roadfill, and topsoil. They can use it to identify areas where bedrock, wetness, or very firm soil layers can cause difficulty in excavation.

Health officials, highway officials, engineers, and others may also find this survey useful. The survey can help them plan the safe disposal of wastes and locate sites for pavements, sidewalks, campgrounds, playgrounds, lawns, trees, and shrubs.

Crops and Pasture

General management needed for crops and pasture is suggested in this section. The system of land capability classification used by the Natural Resources Conservation Service is explained. The estimated yields of the main crops and pasture plants are listed for each soil in table 5 at the back of this publication.

Planners of management systems for individual fields or farms should consider the detailed information given in the description of each soil under the heading "Detailed Soil Map Units" in Part I of this Publication and in the "Soil Properties" portion of Part II. Specific information can be obtained from the local office of the Natural Resources Conservation Service or Cooperative Extension.

Yields per Acre

The average yields per acre that can be expected of the principal irrigated crops under a high level of management are shown in table 5, "Land Capability and Yields per Acre of Crops." In any given year, yields may be higher or lower than those indicated in the table because of variations in rainfall and other climatic factors. The land capability classification of each irrigated map unit also is shown in the table.

The yields are based mainly on the experience and records of farmers, conservationists, and extension agents. Available yield data from nearby counties and results of field trials and demonstrations are also considered.

For yields of irrigated crops, it is assumed that the irrigation system is adapted to the soils and to the crops grown, that good-quality irrigation water is uniformly applied as needed, and that tillage is kept to a minimum.

The management needed to obtain the indicated yields of the various crops depends on the kind of soil and the crop. Management can include drainage, erosion control, and protection from flooding; the proper planting and seeding rates; suitable high-yielding crop varieties; appropriate and timely tillage; control of weeds, plant diseases, and harmful insects; favorable soil reaction and optimum levels of nitrogen, phosphorus, potassium, and trace elements for each crop; effective use of crop

residue, barnyard manure, and green manure crops; and harvesting that ensures the smallest possible loss.

The estimated yields reflect the productive capacity of each soil for each of the principal crops. Yields are likely to increase as new production technology is developed. The productivity of a given soil compared with that of other soils, however, is not likely to change.

Crops other than those shown in the table are grown in the survey area, but estimated yields are not listed because the acreage of such crops is small. The local office of the Natural Resources Conservation Service or Cooperative Extension can provide information about the management and productivity of the soils for those crops.

Pasture and Hayland Interpretations

Under good management, proper grazing is essential for the production of high quality forage, stand survival, and erosion control. Proper grazing helps plants to maintain sufficient and generally vigorous top growth during the growing season. Brush control is essential in many areas, and weed control generally is needed. Rotation grazing and renovation also are important management practices.

Yield estimates are often provided in animal unit months (AUM), the amount of forage or feed required to feed one animal unit (one cow, one horse, one mule, five sheep, or five goats) for 30 days.

Information about forage yields other than those shown in table 5, "Land Capability and Yields per Acre of Crops" can be provided by the local office of the Natural Resources Conservation Service or Cooperative Extension.

Land Capability Classification

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in

grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations designed to show suitability and limitations of groups of soils for rangeland, for woodland, or for engineering purposes.

In the capability system, as described in "Land Capability Classification" (6), soils generally are grouped at three levels: capability class, subclass, and unit. These levels indicate the degree and kinds of limitations affecting mechanized farming systems that produce the more commonly grown field crops, such as corn, small grain, cotton, hay, and field-grown vegetables. Only class and subclass are used in this survey.

Capability classes, the broadest groups, are designated by Roman numerals I through VIII. The numerals indicate progressively greater limitations and narrower choices for practical use.

If properly managed, soils in classes I, II, III, and IV are suitable for the mechanized production of commonly grown field crops and for pasture and woodland. The degree of the soil limitations affecting the production of cultivated crops increases progressively from class I to class IV. The limitations can affect levels of production and the risk of permanent soil deterioration caused by erosion and other factors.

Soils in classes V, VI, and VII are generally not suited to the mechanized production of commonly grown field crops without special management, but they are suitable for plants that provide a permanent cover, such as grasses and trees. The severity of the soil limitations affecting crops increases progressively from class V to class VII. The local office of the Cooperative Extension or Natural Resources Conservation Service can provide guidance on the use of these soils as cropland.

Areas in class VIII are generally not suitable for crops, pasture, or woodland without a level of management that is impractical. These areas may have potential for other uses, such as recreational facilities and wildlife habitat.

Capability subclasses indicate the dominant limitations in the class. They are designated by adding a small letter, e, w, s, or c, to the class numeral, for example, IIe. The letter e shows that the main hazard is the risk of erosion unless a close-growing plant cover is maintained; w shows that water in or on the soil interferes with plant growth or cultivation (in some soils the wetness can be partly corrected by artificial drainage); s shows that the soil is limited mainly because it is shallow, droughty, or stony; and c shows that the chief limitation is a climate that is very cold or very dry.

There are no subclasses in class I because the soils of this class have few limitations. Class V contains only the

subclasses indicated by w, s, or c because the soils in class V are subject to little or no erosion. They have other limitations that restrict their use mainly to pasture, rangeland, woodland, wildlife habitat, or recreation.

The irrigated capability classification of each farmland map unit is given in table 5, "Land Capability and Yields per Acre of Crops."

Erosion Factors

Soil erodibility factors Kw and Kf quantify the susceptibility of soil to detachment by water. A wind erodibility group (WEG) is a grouping of soils that have similar properties affecting their resistance to soil blowing. The Wind Erodibility Index (I) is based on the WEG and is used in the wind erosion equation. Soil erodibility factors Kw and Kf are used in the Revised Universal Soil Loss Equation. The procedure for predicting soil loss is useful in guiding the selection of soil and water conservation practices.

Soil Erodibility Factors Kw and Kf

Factor Kw shows the erodibility of the whole soil, and factor Kf shows the erodibility of only the fine-earth fraction, the material less than 2.0 millimeters in diameter. The soil erodibility factor indicates the susceptibility of a soil to sheet and rill erosion by water. The soil properties that influence erodibility are those that affect the infiltration rate, the movement of water through the soil, and the water storage capacity of the soil and those that allow the soil to resist dispersion, splashing, abrasion, and the transporting forces of rainfall and runoff. The most important soil properties are the content of silt plus very fine sand, the content of sand coarser than very fine sand, the content of organic matter, soil structure, and permeability.

Wind Erodibility Groups

Soils are assigned wind erodibility groups on the basis of the properties of the surface layer. The properties that are most important with respect to soil blowing are soil texture, content of organic matter, calcium carbonate, reaction, content of rock fragments, and aggregate stability. Wind erodibility is inversely related to the percentage of dry surface soil aggregates larger than 0.84 millimeter in diameter. From this percentage, the wind erodibility index factor (I) is determined.

Soil Loss Tolerance (T) Factor

The annual Soil Loss Tolerance (T) is an estimate of the maximum rate of erosion that can occur without affecting

crop productivity. The T factor is expressed in tons of soil loss per acre per year. Values of 1 to 5 are used. T values are assigned according to properties of limiting subsurface soil layers. The designation of a limiting layer implies that the material above the layer has more favorable properties for crop production. The criteria for assigning T are based on the severity of physical or chemical properties of subsurface layers, the climatically influenced properties of

soil moisture and temperature, the economic feasibility of utilizing management practices to overcome limiting layers or conditions, and the depth to the limiting layer.

Additional information about wind erodibility groups and I, Kw, Kf, and T factors can be obtained from local offices of the Natural Resources Conservation Service or Cooperative Extension.

Rangeland and Grazeable Woodland Resource Management

In this soil survey report, the term "rangeland" refers to a kind of land rather than a land use. Areas of rangeland provide many important resource values. They act as vast watersheds and provide habitat for wildlife, livestock forage, and opportunities for recreation. The resource values of rangeland are intricately related to each other and are often directly affected by rangeland management. Because of the interrelationships among rangeland resources, rangeland managers should consider all resource values when planning range improvements.

About 90 percent of the acreage in this survey area is rangeland. Livestock grazing is the principal agricultural use of the rangeland. Livestock operations are mostly cow-calf or cow-calf-sheep enterprises. Ranches range from a few hundred to several thousands acres in size. They rely heavily on permitted use of public lands. Most of the rangeland within the survey area is administered by the Bureau of Land Management.

Soil-Site Correlation

During the course of this soil survey, ecological sites were correlated with the soils identified within the survey area. These correlations are based on the current understanding of soil-plant-climate relationships in the survey area. Soil properties that affect moisture supply and plant nutrients have the greatest influence on the productivity of range plants. Soil reaction, content of salts or lime, and topographic position are also important. The relationship of climate to vegetation and soils is considered in the classification of soils and in soil mapping criteria. In areas that have similar climate and topography, differences in the kind and amount of vegetation produced on rangeland are closely related to the kind of soil. Ecological sites can generally be determined from soil maps and map unit legends developed for the survey area.

Range Condition

Mining is the major industrial use of rangeland in the survey area and has played an important role in the history of the area. During the mining booms of the 1870's, herds of cattle, sheep, oxen, horses, and burros were brought to Nye County, to be used as a source of power and food for the developing mining communities. Heavy grazing pressure during these boom periods depleted native stands of forage throughout much of the survey area.

The early devastation of rangeland plant communities through uncontrolled livestock grazing has largely ended, but severely depleted areas still reflect the abuses of early settlement. In the most severely disturbed areas, palatable shrubs generally have been replaced by less desirable shrubs and many native perennial grasses and forbs have been replaced by alien or introduced annual grasses and forbs. Recovery of the plant community has been most evident where previous abuses were limited. The greater the level of deterioration, the longer the period of recovery. Although present-day rangeland production and plant diversity in the survey area are generally less than optimal, the overall condition of the rangeland is much improved from what was common in the early 1900's.

Range condition is determined by a comparison of the present plant community with the natural potential plant community on a particular rangeland ecological site. The more closely the existing community resembles the potential plant community, the higher the range condition. Range condition is an ecological rating only. It does not have a specific meaning that pertains to the present plant community for a given use. Ratings of range condition alone do not indicate whether the present plant community is improving or deteriorating in relation to its potential. The trend in range condition is a measure of the direction of change in the condition. It is an expression of the effects

of current use. The present range condition is a reflection of the accumulated effects of past use. Once the potential plant communities have been identified and the present range condition has been determined, monitoring the trend in range condition over time can indicate whether management objectives are being met.

Rangeland Management

Range management requires a knowledge of the kinds of soil and of the natural potential plant communities the soils in a given area can support. It also requires an evaluation of the present range condition. For most rangeland plant communities, good management can improve the present condition and productivity of the range and can help to prevent accelerated erosion. Proper management of rangeland depends on many factors. The season of grazing use, the kind of grazing animal, the intensity and distribution of grazing, and the range resource potential are important management considerations. Multiple-use management that meets present and future needs requires extensive knowledge of the capabilities and limitations of the range resources. An understanding of the soil properties and dynamics of native plant communities is fundamental in applying ecological principles to the evaluation and management of rangeland.

Generally, the objective of range management is to manage grazing so that the plants growing on a site are about the same in kind and amount as the natural potential plant community for that site. Such management generally results in the optimum production of vegetation, conservation of water, and control of erosion. To meet a special need or a specific use, however, it may be desirable to manage for a plant community other than the potential plant community for the site. Care must always be taken not to increase the susceptibility to erosion. Future uses and the relative ability of given sites to respond to management should be considered if the management objective is to establish a plant community other than the potential plant community.

Desirable forage plants of many plant communities within the survey area have been greatly depleted or even eliminated by excessive and untimely grazing. Generally, perennial grasses have decreased in abundance and woody plants have increased. The productivity of forage plants is below the production potential on many sites. Uneven livestock distribution has resulted in both overuse and underuse of the native forage.

An increase in the abundance and size of shrubs and an extensive invasion of cheatgrass (an introduced annual grass) have reduced the amount of soil moisture and

nutrients available to perennial grasses and forbs. In areas where the range condition has not excessively deteriorated and an adequate population of desirable perennial grasses and forbs is available to respond to a release from plant competition, brush management can be effective in reversing the trend toward an increasing dominance of woody vegetation.

Abusive grazing of riparian vegetation by livestock can reduce water quality, eliminate streamside shrubs, cause soil compaction, accelerate erosion, and break down streambanks. Proper management of the rangeland in the survey area requires that special attention be given to riparian zones. Fortunately, riparian communities often respond to improved livestock management more rapidly than upland plant communities. Grazing treatments in riparian areas vary with the stability of the riparian plant community and the condition of the adjacent upland plant communities.

Wildlife Considerations

Reducing the extent of brush cover can benefit many game and nongame wildlife species where the habitat needs of those animals are properly identified and planned for in the manipulation of vegetation. For instance, extensive areas dominated by big sagebrush provide marginal habitat for pronghorn antelope. The habitat can be improved by measures that decrease the density and height of the sagebrush. The habitat for mule deer can be improved by removing big sagebrush and thus enhancing the diversity of understory grasses and forbs or increasing the production of green forage on transitional range that has an excessive cover of shrubs.

For other species, however, brush removal may be detrimental. Sage grouse is a habitat-specific bird, relying primarily on sagebrush to meet its life requirements. Plans for the manipulation of sagebrush stands on range inhabited by sage grouse should provide for the maintenance of suitable grouse habitat, especially nesting habitat near strutting grounds. The optimum nesting habitat for sage grouse is one in which the crown cover of sagebrush that is less than 30 inches high is 20 to 40 percent. Treatment of the sagebrush that reduces the cover from 40 to 20 percent may not seriously degrade the nesting habitat and commonly improves the quality of forage for sage grouse.

In an assessment of how the manipulation of vegetation affects wildlife, "edge" habitat is an important consideration. The structure and dominance of plants that remain after manipulation differ with the method of treatment. Fire removes all of the vegetation, including the skeletons or woody portions of shrubs, and thus

eliminates the structure of woody vegetation from the treated area. Prescribed burning may enhance the habitat for a number of wildlife species. Mule deer and many nongame species select recently burned areas for feeding. Brush treatment with herbicides leaves the dead skeletons of shrubs and retains the shrub structure. Herbicides may kill broad-leaved forbs in the shrub understory, which are staples in the diet of many game and nongame species. Chaining and, to a lesser degree, brush beating change the vegetative structure from tree/shrub or shrub to grassland, and the residue they leave on the ground creates habitat for small mammals.

Many wildlife species in the survey area depend on riparian plant communities during much of the year. These plant communities support wildlife not common to desert ecosystems, such as short-eared owls, Pacific tree frogs, and long-tailed weasels. Riparian communities also provide islands of habitat in desert environments for migrating birds. Nuthatches, warblers, and other species that nest in forest ecosystems migrate to desert riparian zones in spring and fall.

Livestock water developments can be beneficial to wildlife if the water is available when the wildlife species occupy the area. Forage for wildlife can be enhanced if adapted forbs are included in a rangeland seeding.

More specific wildlife management concerns are addressed under the heading "Plant Communities in Nye County, Nevada, Southwest Part." Additional information about wildlife management can be obtained from local offices of the Natural Resources Conservation Service, Cooperative Extension, or Nevada Division of Wildlife.

Plant Communities of Nye County, Southwest Part

A rangeland ecological site is a distinctive kind of rangeland that differs from other kinds of rangeland in its ability to produce a characteristic natural plant community. An ecological site is the product of all environmental factors responsible for its development. It can support a native plant community typified by an association of species that differs from the potential plant community of other ecological sites in the kind or proportion of species or in total production. Disturbances, such as drought, fire, and grazing by native fauna, and the damage caused by insects and disease are recognized as natural factors in the development of native plant communities.

The appendix section "Rangeland Plants and Woodland Understory" shows the rangeland plants and woodland understory for each soil and contrasting inclusion in the detailed soil map units, the rangeland or woodland ecological site, the common plant name and scientific

plant symbol for the characteristic vegetation, the average percent composition for each species in the potential plant community, the rangeland or woodland ecological site, and the total annual production of vegetation in favorable, normal, and unfavorable years. The characteristic vegetation, which consists of the grasses, forbs, shrubs, and immature trees that make up most of the potential plant community for each soil, is listed by common name. For rangeland, the expected percentage of the total annual production is given for each species making up the characteristic vegetation. The amount that can be used as forage depends on the kinds of grazing animals, the grazing season, and the availability of forage. Many plants, trees, and shrubs are inaccessible to foraging animals. For woodland, the percentage of the total annual production is not given because of a wide variation of production under different tree canopies. The presence of a plant species in the understory vegetation is shown by an "X" in the composition section of the table.

Total potential production is the amount of vegetation that can be expected to grow annually on well managed rangeland or woodland that supports the potential natural community. It includes all vegetation, whether or not it is palatable to grazing animals. It includes the current year's production of leaves, twigs, and fruits of woody plants. It does not include the increase in stem diameter of trees and shrubs. It is expressed in pounds per acre of air-dry vegetation for favorable, normal, and unfavorable years. In a favorable year, above average amounts and optimum timing of precipitation during periods of warm temperatures make growing conditions substantially better than average. In a normal year, growing conditions are about average. In an unfavorable year, growing conditions are well below average, generally because of low available soil moisture.

Riparian areas or meadows are interspersed throughout the survey area. Riparian vegetation grows on the flood plains along perennial streams. Stringer meadows are along spring-fed stream channels where moisture is available to plants throughout most of the growing season. Meadow vegetation also grows on the periphery of seeps and springs. Although they make up a small acreage in the survey area, the riparian zones are important because they provide free water, which improves the productivity of the riparian vegetation and lengthens the growing season of the vegetation. The zones are characterized by diverse plant species and a structural diversity of vegetation. The zones along stream channels are typically linear. The linear nature of the zones maximizes the edge effect between the zones and the adjacent uplands. An "edge," or ecotone, is a transition between plant communities or a joining of different vegetative structures within plant communities. It commonly is richer in wildlife than either of the adjoining communities.

Nye County is in the southern part of the Basin and Range Physiographic Province. The major plant associations in the survey area typify the general zonation of vegetation common in the Great Basin Region. Valley floors and the lower piedmont slopes are dominated by salt-desert shrub plant communities. Above the salt-desert shrub zone, sagebrush-grass plant communities are prevalent in areas where the mean annual precipitation is 8 inches or more.

Salt-desert shrub communities normally reflect either a climatically dry environment where the mean annual precipitation is less than 8 inches or physiologically dry soil conditions. High concentrations of salts that interfere with the uptake of water by plants can create physiologically dry soil conditions. Representative shrubs of the salt-desert shrub communities are shadscale, bud sagebrush, winterfat, and Douglas rabbitbrush. The common grasses include galleta, Indian ricegrass, bottlebrush squirreltail, Sandberg bluegrass, and desert needlegrass. Within the Mojave desert area, creosotebush, white bursage, and shadscale are common shrubs. Common grasses are big galleta and Indian ricegrass.

The salt-desert shrub plant communities in the survey area include stands dominated by a single shrub species and stands that support relatively heterogeneous mixtures of shrubs and grasses. The vegetation is generally sparse, normally covering less than 20 percent of the surface. Wind erosion and water erosion are hazards because of the naturally sparse plant cover in most areas. The interspaces between plants in salt-desert shrub communities commonly are stabilized by surface pavements of rock fragments, by a puddled and crusted soil surface, or by microphytic (algae) surface crusts. These protective features can be damaged by livestock or off-road vehicle traffic.

Salt-desert shrub plant communities are most valuable as winter range for livestock. They can produce high-quality winter forage and are usually subject to only light snowfall. Most of the desirable forage species in these communities are adversely affected by grazing in the early spring, heavy use, or both. Where native rangeland communities are grazed in winter, an emergency supply of feed should be readily available to carry livestock through periods of unusually severe weather.

Properly regulated grazing management can enhance the long-term productivity of salt-desert shrub plant communities. This management includes deferred grazing during critical growth periods in late winter, rotational grazing, and control of the intensity and season of use. Fencing, herding, water hauling, and controlling livestock access to watering facilities can achieve a better distribution of grazing. Because of the harsh environment

of the salt-desert shrub zone, manipulation of vegetation and revegetation projects generally are not advisable.

Salt-desert shrub communities provide habitat for a wide variety of nongame species, including collared lizards, antelope kangaroo rats, loggerhead shrikes, and various rattlesnakes. Plant communities that are dominated by shadscale or winterfat and associated forbs and grasses provide important winter range for pronghorn antelope. Fencing can deter the migration of pronghorn antelope because these animals commonly do not jump. As a result, the lower wire of the fences should be high enough for antelope to crawl under. Where feasible, the fence lines should be routed so that they cause the least disruption to antelope travel. Livestock water developments are beneficial to antelope and other wildlife if the water is available when the animals occupy the area. Few mule deer use salt-desert shrub communities, which generally are unimportant in deer management. Feral horses use these communities in winter.

Within the salt-desert shrub zone are low areas that commonly receive extra moisture as runoff from higher landscape positions and as shallow, low-velocity overflow during periods of runoff. Black greasewood, fourwing saltbush, and quailbush are important plants on these sites.

Other plant communities that reflect extra moisture conditions are adjacent to valley floor playas. These areas may have a high water table during periods of runoff. Black greasewood, shadscale, inland saltgrass, and basin wildrye are the characteristic plants on these sites.

Plant communities that are dominated by black greasewood provide thermal cover for many species of wildlife but have limited value for big game. Because of its spines and coarse structure, black greasewood provides protective cover to nesting birds and small mammals. Although this species is not a preferred forage plant for livestock, cattle and sheep eat the succulent spring growth. On late fall and winter ranges, the fruit of black greasewood and shadscale provides nutritious and palatable feed. The soluble oxalates in black greasewood may be harmful to livestock, especially sheep, if the new growth is excessively grazed in spring.

As snow melts in spring, runoff commonly drains into valley floor basins. It remains for short periods, providing nesting and feeding habitat for some waterfowl. Playas containing water in spring are important resting places for migrating waterfowl. Sand dunes formed through the deposition of windblown sediment are commonly on the leeward side of the playas in this survey area. Although of limited extent, partially stabilized sand dunes provide important habitat for both predator and prey vertebrate wildlife. Kangaroo rats, kit foxes, and bobcats inhabit the sand dunes.

Sagebrush-grass plant communities are at the intermediate elevations (about 5,500 to 7,500 feet) in the survey area. The average annual precipitation at these elevations is between 8 and 10 inches.

Wyoming big sagebrush, and, to a lesser extent, black sagebrush are the dominant woody sagebrush plants at the intermediate elevations in the survey area. Perennial grasses are potentially the dominant herbaceous plants in the sagebrush-grass plant communities. Thurber needlegrass, Indian ricegrass, bottlebrush squirreltail, and muttongrass and galleta are important cool-season bunch grasses. Grazing pressure has been severe on the sagebrush-grass plant communities at the lower elevations. These plant communities are the first to begin growth, or "greenup," during the warming periods of early spring and have traditionally been used for spring grazing by livestock. Close grazing spring after spring will eventually eliminate the perennial understory of grasses and forbs.

Grazing management practices can enhance the long-term productivity of sagebrush-grass communities. These practices include deferred grazing during critical growth periods in spring, rotational grazing, and control of the intensity and season of use. Fencing, herding, water hauling, and controlling livestock access to watering facilities can achieve a better distribution of grazing and facilitate grazing management.

Very few sources of perennial water are available in the sagebrush-grass zone at the middle elevations. Therefore, water developments and watering facilities are key elements in grazing management. Also, they can be of significant value to wildlife. Where the range condition has not deteriorated excessively and an adequate population of desirable perennial grasses and forbs is available to respond to a release from plant competition, brush management can greatly enhance the production of forage for livestock and wildlife.

The selection of plants available for rangeland seeding in the 8- to 10-inch precipitation zone is limited. Suitable species that are tolerant of early spring grazing, however, can be seeded. These species can play a key role in the management of grazing on the adjacent native sagebrush-grass and salt-desert shrub plant communities. Years of below normal precipitation are relatively frequent in this zone. Thus, the factors to be considered in managing rangeland seeding include the risk of seeding failure caused by climate.

Although the sagebrush-grass communities at the middle elevations may provide transitional spring range to pronghorn antelope moving from winter to summer ranges, plant communities that are dominated by big sagebrush are not heavily used by the antelope. Fencing can deter migration of the antelope because these animals commonly do not jump. As a result, the lower wire

of the fences should be high enough for the antelope to crawl under. Where feasible, the fence lines should be routed so that they cause the least disruption to antelope travel. Livestock water developments are beneficial to wildlife, especially deer and antelope, if the water is available when the animals are in the area.

Heavy snow at the higher elevations forces chukar partridge to move into these areas in search of food. The sagebrush-grass communities at the middle elevations are used primarily by mule deer and feral horses as winter range or as transitional range in spring. Spring grazing by livestock in areas used by deer as winter range should be managed so that the turn out of livestock is delayed until after spring "greenup" and the migration of most of the deer.

Sagebrush-grass communities are also at higher elevations in the survey area. The average annual precipitation at these elevations is between 10 and 14 inches.

Wyoming big sagebrush dominates the shrub canopy of high elevation plant communities on the warmer, drier exposures. Basin big sagebrush is most common on the deeper soils at the lower elevations in this precipitation zone. Mountain big sagebrush is sometimes prevalent on the north aspects at the lower elevations of the zone and grows on all aspects at the higher elevations. Low sagebrush is the dominant dwarf sagebrush at the upper elevations in the survey area. Thurber needlegrass, Canby bluegrass, Sandberg bluegrass, and basin wildrye are the major perennial grasses associated with these upper-elevation sagebrush-grass communities. Antelope bitterbrush is an important shrub in many plant communities at these elevations.

High elevation sagebrush-grass communities are suitable for grazing by livestock in summer and fall. Deferred grazing during critical growth periods in spring and early summer, rotational grazing, and control of the intensity and season of use can enhance the long-term productivity of these communities. Fencing, herding, and strategically locating livestock watering facilities help to achieve a better distribution of grazing and facilitate grazing management. Relatively few sources of perennial water are available in areas of the high sagebrush-grass zone. As a result, water developments and watering facilities are key elements in grazing management and can be of significant value to wildlife.

Wyoming big sagebrush communities at the upper elevations are used primarily as winter range by mule deer. They commonly provide habitat for Brewer's sparrow, black-tailed jackrabbits, and sagebrush lizards. Black sagebrush communities provide important summer range for pronghorn antelope. Livestock water developments can be beneficial to wildlife, especially deer and antelope, if the water is available when the animals

are in the area. Mountain big sagebrush and black sagebrush communities provide spring, summer, and fall range for mule deer and feral horses.

Seasonal grazing by livestock removes old grass residue and exposes the regrowth of succulent green stems and leaves that provide food for mule deer. The steep rock-faced cliffs common to these mid elevations have ledges, joints, cracks, and occasional caves and thus provide safe sites for birds and small mammals to nest and rear their young. The common nongame species are sage thrasher, the Great Basin gopher snake, and desert mouse. Areas of exposed lava flow rock, natural breaks in the cliffs, and the associated talus commonly are used as travel lanes by wildlife, including mule deer.

Brush management practices can be very effective in increasing the production of native forage in the high elevation sagebrush-grass zone. They can be beneficial to wildlife as well as livestock. Opening up large, homogeneous stands of sagebrush commonly improves the habitat for wildlife, such as mule deer and pronghorn antelope. Rangeland seeding may be required following the removal of woody vegetation where desirable understory plants are scarce or are not included in the present plant community. A number of forbs and grasses are suitable for dryland seeding in the 10-to 14-inch precipitation zone. Including suitable forbs in the seeding mixture helps to provide additional forage for wildlife, such as pronghorn antelope and mule deer.

Pinyon and juniper plant communities are at upper-elevations in the survey area. Local expansion of pinyon or juniper from woodland sites to the adjacent rangeland is common. The invasion of juniper and pinyon into sagebrush-grass communities has been attributed to overgrazing, a scarcity of naturally recurring fires, and climatic conditions. Young trees are readily killed by fire. The loss of fine fuel to carry fire and, to a lesser extent, fire control have limited the frequency and extent of natural fires in the sagebrush-grass zone. This reduction in the frequency of fires has allowed seedlings to become established in increasing numbers on sites that at one time supported virtually no trees.

Livestock commonly concentrate on the woodland sites, taking advantage of the shade and shelter provided by the tree overstory. These sites also provide habitat for nongame wildlife species, including the bushy-tailed woodrat, the blue-grey gnat-catcher, and the American kestrel; thermal cover for mule deer; and habitat for small mammals and birds.

Areas that have a heterogeneous mixture of vegetative types, including grassland, low shrub, tall shrub, and tree-shrub communities, generally provide an optimum diversity of wildlife habitat. These types of vegetative complexes are common in the sagebrush-grass zones at the intermediate and upper elevations. Moderate browsing

by cattle on antelope bitterbrush in fall can enhance the vigor and growth of the bitterbrush, which is later available for grazing by mule deer and antelope.

Stringer meadows are along spring-fed stream channels in the sagebrush-grass zones at the intermediate and upper elevations. Meadow vegetation also grows on the periphery of seeps and springs. Improper grazing of riparian vegetation by livestock can cause gully erosion. This erosion, in turn, can result in lower water tables, the drying out of meadows, and the loss of valuable wildlife and livestock forage. Grazing management strategies that are sensitive to the development and maintenance of healthy riparian areas are needed.

Plant communities on the high-elevation sites are potentially very productive and normally respond rapidly to management. These sites remain cold and wet through spring and into early summer. They are used as summer range for livestock. Grazing should be delayed until the surface layer has dried sufficiently for compaction to be limited. Snow often blankets these sites by late fall, further restricting the period of livestock grazing. Steeply sloping areas are common throughout the high-elevation sagebrush-grass zone. Livestock tend to overuse the less sloping areas unless grazing is managed for an even distribution of grazing. Fencing, properly locating watering facilities, and herding force livestock to use areas that otherwise might remain ungrazed. Salt and mineral blocks should be placed away from water.

Mule deer use the high-elevation plant communities for summer range. North-facing slopes that have a patchwork of dense stands consisting of mountain browse are important deer-fawning areas. These dense stands should be maintained because they provide cover for wildlife. Areas of aspen woodland provide important cover for wildlife and are a source of shade for livestock and wildlife.

Seeps and springs are common at the high elevations. Water for livestock generally is readily available. Additional water developments may be needed, however, to distribute the livestock evenly. Developed springs, pipelines, and storage tanks are dependable means of supplying water. Seeps and springs developed to provide livestock water can also be beneficial to wildlife. Excluding livestock by fencing the meadow around a seep or spring and piping the water to troughs or other storage facilities outside the enclosure help to protect the meadow vegetation grazed by wildlife. Enough water must be retained in the fenced seep or spring area to maintain the meadow vegetation. Small meadows can be developed and maintained by piping overflow water from livestock troughs into fenced areas.

Many naturally occurring meadows in the sagebrush-grass zones at the mid and higher elevations have been heavily invaded by big sagebrush. The sagebrush

depletes moisture from the meadows. If the sagebrush is removed, the quantity of water and the duration of waterflow increase as grasses return to the meadows. Prescribed burning of dense sagebrush stands can be an economical means of brush management in the high-elevation sagebrush-grass zone. Brush management practices should be designed so that enough of the shrub canopy remains near meadows to provide cover for wildlife.

Rangeland seeding of the high-elevation plant communities is usually not necessary. In most areas, the remnant population of desirable forbs and grasses is sufficient to respond to grazing management and a release from shrub competition. Where rangeland seeding is needed, a wide variety of suitable species can be planted because of the relatively high annual precipitation in this zone.

Woodland Management and Productivity

Table 7, Woodland Management and Productivity, can help forest owners or managers plan the use of soils for wood production. It shows the potential productivity of the soils for wood production.

In table 7, the *potential productivity* of merchantable or *common trees* on a soil is expressed as a site index and as a volume number. The *site index* is the average height, in feet, that dominant and codominant trees of a given species attain in a specified number of years. For pinyon and juniper woodland, site index is based on tree basal area per acre. The site index applies to fully stocked, even-aged, unmanaged stands. Commonly grown trees are those that forest managers generally favor in intermediate or improvement cuttings. They are selected on the basis of growth rate, quality, value, and marketability. More detailed information regarding site index is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

The *volume of wood fiber*, a number, is the yield likely to be produced by the most important tree species. This

number, expressed as cubic feet per acre per year and calculated at the age of culmination of the mean annual increment (CMAI), indicates the amount of fiber produced in a fully stocked, even-aged, unmanaged stand.

Trees to manage are those that are preferred for planting, seeding, or natural regeneration and those that remain in the stand after thinning or partial harvest.

In the Nye County, Nevada, Southwest Part soil survey area, pinyon and juniper are the most common native trees, typically growing on steep mountains and hills. The pinyon and juniper areas are not harvested for commercial wood products, although firewood and fence posts are locally important uses of pinyon and juniper. Standardized ratings for common forest management practices can be made using soil survey information, but are not provided in this report. More detailed information about the criteria used in the ratings for forest management practices is available in the "National Forestry Manual," which is available in local offices of the Natural Resources Conservation Service or on the Internet.

Engineering

This section provides information for planning land uses related to urban development and to water management. Soils are rated for various uses, and the most limiting features are identified. Ratings are given for building site development, sanitary facilities, construction materials, and water management. The ratings are based on observed performance of the soils and on the estimated data and test data in the "Soil Properties" section.

Information in this section is intended for land use planning, for evaluating land use alternatives, and for planning site investigations prior to design and construction. The information, however, has limitations. For example, estimates and other data generally apply only to that part of the soil within a depth of 5 or 6 feet. Because of the map scale, small areas of different soils may be included within the mapped areas of a specific soil.

The information is not site specific and does not eliminate the need for onsite investigation of the soils or for testing and analysis by personnel experienced in the design and construction of engineering works.

Government ordinances and regulations that restrict certain land uses or impose specific design criteria were not considered in preparing the information in this section. Local ordinances and regulations should be considered in planning, in site selection, and in design.

Soil properties, site features, and observed performance were considered in determining the ratings in this section. During the fieldwork for this soil survey, determinations were made about grain-size distribution, liquid limit, plasticity index, soil reaction, depth to bedrock, hardness of bedrock within 5 or 6 feet of the surface, soil wetness, depth to a seasonal high water table, slope, likelihood of flooding, natural soil structure aggregation, and soil density. Data were collected about kinds of clay minerals, mineralogy of the sand and silt fractions, and the kind of adsorbed cations. Estimates were made for erodibility, permeability, corrosivity, shrink-swell potential, available water capacity, and other behavioral characteristics affecting engineering uses.

This information can be used to evaluate the potential of areas for residential, commercial, industrial, and recreational uses; make preliminary estimates of

construction conditions; evaluate alternative routes for roads, streets, highways, pipelines, and underground cables; evaluate alternative sites for sanitary landfills, septic tank absorption fields, and sewage lagoons; plan detailed onsite investigations of soils and geology; locate potential sources of gravel, sand, earthfill, and topsoil; plan drainage systems, irrigation systems, ponds, terraces, and other structures for soil and water conservation; and predict performance of proposed small structures and pavements by comparing the performance of existing similar structures on the same or similar soils.

The information in the tables, along with the soil maps, the soil descriptions, and other data provided in this survey, can be used to make additional interpretations.

Some of the terms used in this soil survey have a special meaning in soil science and are defined in the "Glossary."

Building Site Development

Soil properties influence the development of building sites, including the selection of the site, the design of the structure, construction, performance after construction, and maintenance. Tables 8a and 8b show the degree and kind of soil limitations that affect dwellings with and without basements, small commercial buildings, local roads and streets, shallow excavations, and lawns and landscaping.

The ratings in the tables are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect building site development. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Slightly limited* indicates that the soil has features that are favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited*

indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Dwellings are single-family houses of three stories or less. For dwellings without basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. For dwellings with basements, the foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of about 7 feet. The ratings for dwellings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility. Compressibility is inferred from the Unified classification. The properties that affect the ease and amount of excavation include depth to a water table, ponding, flooding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Small commercial buildings are structures that are less than three stories high and do not have basements. The foundation is assumed to consist of spread footings of reinforced concrete built on undisturbed soil at a depth of 2 feet or at the depth of maximum frost penetration, whichever is deeper. The ratings are based on the soil properties that affect the capacity of the soil to support a load without movement and on the properties that affect excavation and construction costs. The properties that affect the load-supporting capacity include depth to a water table, ponding, flooding, subsidence, linear extensibility (shrink-swell potential), and compressibility (which is inferred from the Unified classification). The properties that affect the ease and amount of excavation include flooding, depth to a water table, ponding, slope, depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, and the amount and size of rock fragments.

Local roads and streets have an all-weather surface and carry automobile and light truck traffic all year. They have a subgrade of cut or fill soil material; a base of gravel, crushed rock, or soil material stabilized by lime or cement;

and a surface of flexible material (asphalt), rigid material (concrete), or gravel with a binder. The ratings are based on the soil properties that affect the ease of excavation and grading and the traffic-supporting capacity. The properties that affect the ease of excavation and grading are depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, depth to a water table, ponding, flooding, the amount of large stones, and slope. The properties that affect the traffic-supporting capacity are soil strength (as inferred from the AASHTO group index number), subsidence, linear extensibility (shrink-swell potential), the potential for frost action, depth to a water table, and ponding.

Shallow excavations are trenches or holes dug to a maximum depth of 5 or 6 feet for graves, utility lines, open ditches, or other purposes. The ratings are based on the soil properties that influence the ease of digging and the resistance to sloughing. Depth to bedrock or a cemented pan, hardness of bedrock or a cemented pan, the amount of large stones, and dense layers influence the ease of digging, filling, and compacting. Depth to the seasonal high water table, flooding, and ponding may restrict the period when excavations can be made. Slope influences the ease of using machinery. Soil texture, depth to the water table, and linear extensibility (shrink-swell potential) influence the resistance to sloughing.

Lawns and landscaping require soils on which turf and ornamental trees and shrubs can be established and maintained. Irrigation is not considered in the ratings. The ratings are based on the soil properties that affect plant growth and trafficability after vegetation is established. The properties that affect plant growth are reaction; depth to a water table; ponding; depth to bedrock or a cemented pan; the available water capacity in the upper 40 inches; the content of salts, sodium, or calcium carbonate; and sulfidic materials. The properties that affect trafficability are flooding, depth to a water table, ponding, slope, stoniness, and the amount of sand, clay, or organic matter in the surface layer.

Sanitary Facilities

Tables 9a and 9b, "Sanitary Facilities," shows the degree and kind of soil limitations that affect septic tank absorption fields, sewage lagoons, sanitary landfills, and daily cover for landfill. The ratings are both verbal and numerical. Rating class terms indicate the extent to which the soils are limited by all of the soil features that affect these uses. *Not limited* indicates that the soil has features that are very favorable for the specified use. Good performance and very low maintenance can be expected. *Slightly limited* indicates that the soil has features that are

favorable for the specified use. The limitations are minor and can be easily overcome. Good performance and low maintenance can be expected. *Somewhat limited* indicates that the soil has features that are moderately favorable for the specified use. The limitations can be overcome or minimized by special planning, design, or installation. Fair performance and moderate maintenance can be expected. *Very limited* indicates that the soil has one or more features that are unfavorable for the specified use. The limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.

Numerical ratings in the tables indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.00 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the use (1.00) and the point at which the soil feature is not a limitation (0.00).

Septic tank absorption fields are areas in which effluent from a septic tank is distributed into the soil through subsurface tiles or perforated pipe. Only that part of the soil between depths of 24 and 60 inches is evaluated. The ratings are based on the soil properties that affect absorption of the effluent, construction and maintenance of the system, and public health. Permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, and flooding affect absorption of the effluent. Stones and boulders, ice, and bedrock or a cemented pan interfere with installation. Subsidence interferes with installation and maintenance. Excessive slope may cause lateral seepage and surfacing of the effluent in downslope areas.

Some soils are underlain by loose sand and gravel or fractured bedrock at a depth of less than 4 feet below the distribution lines. In these soils the absorption field may not adequately filter the effluent, particularly when the system is new. As a result, the ground water may become contaminated.

Sewage lagoons are shallow ponds constructed to hold sewage while aerobic bacteria decompose the solid and liquid wastes. Lagoons should have a nearly level floor surrounded by cut slopes or embankments of compacted soil. Nearly impervious soil material for the lagoon floor and sides is required to minimize seepage and contamination of ground water. Considered in the ratings are slope, permeability, depth to a water table, ponding, depth to bedrock or a cemented pan, flooding, large stones, and content of organic matter.

Soil permeability is a critical property affecting the suitability for sewage lagoons. Most porous soils eventually become sealed when they are used as sites for sewage lagoons. Until sealing occurs, however, the hazard of pollution is severe. Soils that have a permeability rate of more than 2 inches per hour are too

porous for the proper functioning of sewage lagoons. In these soils, seepage of the effluent can result in contamination of the ground water. Ground-water contamination is also a hazard if fractured bedrock is within a depth of 40 inches, if the water table is high enough to raise the level of sewage in the lagoon, or if floodwater overtops the lagoon.

A high content of organic matter is detrimental to proper functioning of the lagoon because it inhibits aerobic activity. Slope, bedrock, and cemented pans can cause construction problems, and large stones can hinder compaction of the lagoon floor. If the lagoon is to be uniformly deep throughout, the slope must be gentle enough and the soil material must be thick enough over bedrock or a cemented pan to make land smoothing practical.

A *trench sanitary landfill* is an area where solid waste is placed in successive layers in an excavated trench. The waste is spread, compacted, and covered daily with a thin layer of soil excavated at the site. When the trench is full, a final cover of soil material at least 2 feet thick is placed over the landfill. The ratings in the table are based on the soil properties that affect the risk of pollution, the ease of excavation, trafficability, and revegetation. These properties include permeability, depth to bedrock or a cemented pan, depth to a water table, ponding, slope, flooding, texture, stones and boulders, highly organic layers, soil reaction, and content of salts and sodium. Unless otherwise stated, the ratings apply only to that part of the soil within a depth of about 6 feet. For deeper trenches, onsite investigation may be needed.

Hard, nonrippable bedrock, creviced bedrock, or highly permeable strata in or directly below the proposed trench bottom can affect the ease of excavation and the hazard of ground-water pollution. Slope affects construction of the trenches and the movement of surface water around the landfill. It also affects the construction and performance of roads in areas of the landfill.

Soil texture and consistence affect the ease with which the trench is dug and the ease with which the soil can be used as daily or final cover. They determine the workability of the soil when dry and when wet. Soils that are plastic and sticky when wet are difficult to excavate, grade, or compact and are difficult to place as a uniformly thick cover over a layer of refuse.

The soil material used as the final cover for a trench landfill should be suitable for plants. It should not have excess sodium or salts and should not be too acid. The surface layer generally has the best workability, the highest content of organic matter, and the best potential for plants. Material from the surface layer should be stockpiled for use as the final cover.

In an *area sanitary landfill*, solid waste is placed in successive layers on the surface of the soil. The waste is

spread, compacted, and covered daily with a thin layer of soil from a source away from the site. A final cover of soil material at least 2 feet thick is placed over the completed landfill. The ratings in the table are based on the soil properties that affect trafficability and the risk of pollution. These properties include flooding, permeability, depth to a water table, ponding, slope, and depth to bedrock or a cemented pan.

Flooding is a serious problem because it can result in pollution in areas downstream from the landfill. If permeability is too rapid or if fractured bedrock, a fractured cemented pan, or the water table is close to the surface, the leachate can contaminate the water supply. Slope is a consideration because of the extra grading required to maintain roads in the steeper areas of the landfill. Also, leachate may flow along the surface of the soils in the steeper areas and cause difficult seepage problems.

Daily cover for landfill is the soil material that is used to cover compacted solid waste in an area sanitary landfill. The soil material is obtained offsite, transported to the landfill, and spread over the waste. The ratings in the table also apply to the final cover for a landfill. They are based on the soil properties that affect workability, the ease of digging, and the ease of moving and spreading the material over the refuse daily during wet and dry periods. These properties include soil texture, depth to a water table, ponding, rock fragments, slope, depth to bedrock or a cemented pan, reaction, and content of salts, sodium, or lime.

Loamy or silty soils that are free of large stones and excess gravel are the best cover for a landfill. Clayey soils may be sticky and difficult to spread; sandy soils are subject to wind erosion.

Slope affects the ease of excavation and of moving the cover material. Also, it can influence runoff, erosion, and reclamation of the borrow area.

After soil material has been removed, the soil material remaining in the borrow area must be thick enough over bedrock, a cemented pan, or the water table to permit revegetation. The soil material used as the final cover for a landfill should be suitable for plants. It should not have excess sodium, salts, or lime and should not be too acid.

Waste Management

Soil properties are important when organic waste is applied as fertilizer and wastewater is applied in irrigated areas. They also are important when the soil is used as a medium for the treatment and disposal of the organic waste and wastewater. Unfavorable soil properties can result in environmental damage.

The use of organic waste and wastewater as production resources results in energy and resource conservation and minimizes the problems associated with waste disposal. If disposal is the goal, applying a maximum amount of the organic waste or the wastewater to a minimal area holds costs to a minimum and environmental damage is the main hazard. If reuse is the goal, a minimum amount should be applied to a maximum area and environmental damage is unlikely.

Interpretations developed for waste management may include ratings for manure- and food-processing waste, municipal sewage sludge, use of wastewater for irrigation, and treatment of wastewater by slow rate, overland flow, and rapid infiltration processes.

Specific information regarding waste management is available at the local office of the Natural Resources Conservation Service or Cooperative Extension.

Construction Materials

Tables 10a and 10b, "Construction Materials," gives information about the soils as potential sources of gravel, sand, topsoil, reclamation material, and roadfill. Normal compaction, minor processing, and other standard construction practices are assumed.

The soils are rated *good*, *fair*, or *poor* as potential sources of topsoil, reclamation material, and roadfill. The features that limit the soils as sources of these materials are specified in the tables. The numerical ratings given after the specified features indicate the degree to which the features limit the soils as sources of topsoil, reclamation material, or roadfill. The lower the number, the greater the limitation.

The soils are rated as a *probable* or *improbable* source of sand and gravel. A rating of *probable* means that the source material is likely to be in or below the soil. The numerical ratings in these columns indicate the degree of probability. The number 0.00 indicates that the soil is an improbable source. A number between 0.00 and 1.00 indicates the degree to which the soil is a probable source of sand or gravel.

Sand and *gravel* are natural aggregates suitable for commercial use with a minimum of processing. They are used in many kinds of construction. Specifications for each use vary widely. In table 10, "Construction Materials," only the probability of finding material in suitable quantity is evaluated. The suitability of the material for specific purposes is not evaluated, nor are factors that affect excavation of the material. The properties used to evaluate the soil as a source of sand or

gravel are gradation of grain sizes (as indicated by the Unified classification of the soil), the thickness of suitable material, and the content of rock fragments. If the lowest layer of the soil contains sand or gravel, the soil is rated as a probable source regardless of thickness. The assumption is that the sand or gravel layer below the depth of observation exceeds the minimum thickness.

Topsoil is used to cover an area so that vegetation can be established and maintained. The upper 40 inches of a soil is evaluated for use as topsoil. Also evaluated is the reclamation potential of the borrow area. The ratings are based on the soil properties that affect plant growth; the ease of excavating, loading, and spreading the material; and reclamation of the borrow area. Toxic substances, soil reaction, and the properties that are inferred from soil texture, such as available water capacity and fertility, affect plant growth. The ease of excavating, loading, and spreading is affected by rock fragments, slope, depth to a water table, soil texture, and thickness of suitable material. Reclamation of the borrow area is affected by slope, depth to a water table, rock fragments, depth to bedrock or a cemented pan, and toxic material.

The surface layer of most soils is generally preferred for topsoil because of its organic matter content. Organic matter greatly increases the absorption and retention of moisture and nutrients for plant growth.

Reclamation material is used in areas that have been drastically disturbed by surface mining or similar activities. When these areas are reclaimed, layers of soil material or

unconsolidated geological material, or both, are replaced in a vertical sequence. The reconstructed soil favors plant growth. The ratings in the table do not apply to quarries and other mined areas that require an offsite source of reconstruction material. The ratings are based on the soil properties that affect erosion and stability of the surface and the productive potential of the reconstructed soil.

These properties include the content of sodium, salts, and calcium carbonate; reaction; available water capacity; erodibility; texture; content of rock fragments; and content of organic matter and other features that affect fertility.

Roadfill is soil material that is excavated in one place and used in road embankments in another place. In this table, the soils are rated as a source of roadfill for low embankments, generally less than 6 feet high and less exacting in design than higher embankments.

The ratings are for the whole soil, from the surface to a depth of about 5 feet. It is assumed that soil layers will be mixed when the soil material is excavated and spread.

The ratings are based on the amount of suitable material and on soil properties that affect the ease of excavation and the performance of the material after it is in place. The thickness of the suitable material is a major consideration. The ease of excavation is affected by large stones, depth to a water table, and slope. How well the soil performs in place after it has been compacted and drained is determined by its strength (as inferred from the AASHTO classification of the soil) and linear extensibility (shrink-swell potential).

Soil Properties

Data relating to soil properties are collected during the course of the soil survey. The data and the estimates of soil and water features listed in tables are explained on the following pages.

Soil properties are determined by field examination of the soils and by laboratory index testing of some benchmark soils. Established standard procedures are followed. During the survey, many shallow borings are made and examined to identify and classify the soils and to delineate them on the soil maps. Samples are taken from some typical profiles and tested in the laboratory to determine grain-size distribution, plasticity, and compaction characteristics.

Estimates of soil properties are based on field examinations, on laboratory tests of samples from the survey area, and on laboratory tests of samples of similar soils in nearby areas. Tests verify field observations, verify properties that cannot be estimated accurately by field observation, and help to characterize key soils.

The estimates of soil properties shown in the tables include the range of grain-size distribution and Atterberg limits, the engineering classification, and the physical and chemical properties of the major layers of each soil. Pertinent soil and water features also are given.

Engineering Index Properties

Table 11, "Engineering Index Properties" gives estimates of the engineering classification and of the range of index properties for the major layers of each soil in the survey area. Most soils have layers of contrasting properties within the upper 5 or 6 feet.

Depth to the upper and lower boundaries of each layer is indicated. The range in depth and information on other properties of each layer are given in the series descriptions in Part I of this survey.

Texture is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand

is as much as 15 percent, an appropriate modifier is added, for example, "gravelly." Textural terms are defined in the "Glossary."

Classification of the soils is determined according to the system adopted by the American Association of State Highway and Transportation Officials (1) and the Unified soil classification system (2).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to grain-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, SP-SM.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of grain-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

Rock fragments larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

Percentage (of soil particles) passing designated sieves is the percentage of the soil fraction less than 3 inches in diameter based on an oven-dry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters,

respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

Liquid limit and *plasticity index* (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

The estimates of grain-size distribution, liquid limit, and plasticity index are generally rounded to the nearest 5 percent. Thus, if the ranges of gradation and Atterberg limits extend a marginal amount (1 or 2 percentage points) across classification boundaries, the classification in the marginal zone is omitted in the table.

Physical and Chemical Properties

Table 12, "Physical Properties of the Soils," and table 13, "Chemical Properties of the Soils," show estimates of some characteristics and features that affect soil behavior. These estimates are given for the major layers of each soil in the survey area. The estimates are based on field observations and on test data for these and similar soils.

Depth to the upper and lower boundaries of each layer is indicated. The range in depth and information on other properties of each layer are given in the series descriptions in Part I of this survey.

Clay as a soil separate, or component, consists of mineral soil particles that are less than 0.002 millimeter in diameter. The estimated clay content of each major soil layer is given as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The amount and kind of clay greatly affect the fertility and physical condition of the soil. They determine the ability of the soil to adsorb cations and to retain moisture. They influence shrink-swell potential, permeability, plasticity, the ease of soil dispersion, and other soil properties. The amount and kind of clay in a soil also affect tillage and earth-moving operations.

Moist bulk density is the weight of soil (oven-dry) per unit volume. Volume is measured when the soil is at field moisture capacity, that is, the moisture content at 1/3-bar moisture tension. Weight is determined after drying the soil at 105 degrees C. In table 12, "Physical Properties of the Soils," the estimated moist bulk density of each major soil horizon is expressed in grams per cubic centimeter of soil material that is less than 2 millimeters in diameter. Bulk density data are used to compute shrink-swell potential, available water capacity, total pore space, and other soil properties. The moist bulk density of a soil indicates the pore space available for water and roots. A bulk density of more than 1.6 can restrict water storage and root penetration. Moist bulk density is influenced by

texture, kind of clay, content of organic matter, and soil structure.

Permeability refers to the ability of a soil to transmit water or air. The estimates indicate the rate of downward movement of water when the soil is saturated. They are based on soil characteristics observed in the field, particularly structure, porosity, and texture. Permeability is considered in the design of soil drainage systems and septic tank absorption fields.

Available water capacity refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in inches of water per inch of soil for each major soil layer. The capacity varies depending on soil properties that affect the retention of water and the depth of the root zone. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. Available water capacity is not an estimate of the quantity of water actually available to plants at any given time.

Shrink-swell potential is the potential for volume change in a soil with a loss or gain in moisture. Volume change occurs mainly because of the interaction of clay minerals with water and varies with the amount and type of clay minerals in the soil. The size of the load on the soil and the magnitude of the change in soil moisture content influence the amount of swelling of soils in place.

Laboratory measurements of swelling of undisturbed clods were made for many soils. For others, swelling was estimated on the basis of the kind and amount of clay minerals in the soil and on measurements of similar soils.

If the shrink-swell potential is rated moderate to very high, shrinking and swelling can cause damage to buildings, roads, and other structures. Special design is often needed.

Shrink-swell potential classes are based on the change in length of an unconfined clod as moisture content is increased from air-dry to field capacity. The classes are *low*, a change of less than 3 percent; *moderate*, 3 to 6 percent; and *high*, more than 6 percent. *Very high*, more than 9 percent, is sometimes used.

Organic matter is the plant and animal residue in the soil at various stages of decomposition. In table 12, "Physical Properties of Soils," the estimated content of organic matter is expressed as a percentage, by weight, of the soil material that is less than 2 millimeters in diameter.

The content of organic matter in a soil can be maintained or increased by returning crop residue to the soil. Organic matter affects the available water capacity, infiltration rate, and tilth. It is a source of nitrogen and other nutrients for crops.

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) to predict the average rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, very fine sand, sand, and organic matter (as much as 4 percent) and on soil structure and permeability. The estimates are modified by the presence of rock fragments. Values of K range from 0.02 to 0.69. The higher the value, the more susceptible the soil is to sheet and rill erosion.

Erosion factor Kf indicates the erodibility of the fine-earth fraction, or the material less than 2 millimeters in size.

Erosion factor T is an estimate of the maximum average rate of soil erosion by wind or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year.

Wind erodibility groups are made up of soils that have similar properties affecting their resistance to soil blowing in cultivated areas. The groups indicate the susceptibility of soil to soil blowing. Soils are grouped according to the following distinctions:

1. Coarse sands, sands, fine sands, and very fine sands. These soils generally are not suitable for crops. They are extremely erodible and vegetation is difficult to establish.
2. Loamy coarse sands, loamy sands, loamy fine sands, loamy very fine sands, and sapric soil material. These soils are very highly erodible. Crops can be grown if intensive measures to control soil blowing are used.
3. Coarse sandy loams, sandy loams, fine sandy loams, and very fine sandy loams. These soils are highly erodible. Crops can be grown if intensive measures to control soil blowing are used.
- 4L. Calcareous loams, silt loams, clay loams, and silty clay loams that have more than 5 percent finely divided calcium carbonate. These soils are highly erodible. Crops can be grown if intensive measures to control soil blowing are used.
4. Clays, silty clays, noncalcareous clay loams, and silty clay loams that are more than 35 percent clay. These soils are moderately erodible. Crops can be grown if measures to control soil blowing are used.
5. Noncalcareous loams and silt loams that are less than 20 percent clay and sandy clay loams, sandy clays, and hemic soil material. These soils have less than 5 percent finely divided calcium carbonate. These soils are moderately erodible. Crops can be grown if measures to control soil blowing are used.
6. Noncalcareous loams and silt loams that are more than 20 percent clay and noncalcareous clay loams that are less than 35 percent clay. These soils have less than 5 percent finely divided calcium carbonate. These soils

are moderately erodible. Crops can be grown if ordinary measures to control soil blowing are used.

7. Silts, noncalcareous silty clay loams that are less than 35 percent clay, and fibric soil material. These soils have less than 5 percent finely divided calcium carbonate. These soils are very slightly erodible. Crops can be grown if ordinary measures to control soil blowing are used.

8. Soils that are not subject to soil blowing because of rock fragments on the surface or because of surface wetness.

Wind erodibility index is a numerical value indicating the susceptibility of soil to soil blowing, or the tons per acre per year that can be expected to be lost to soil blowing. There is a close correlation between soil blowing and the size and durability of surface clods, rock fragments, organic matter, and a calcareous reaction. Soil moisture and frozen soil layers also influence soil blowing.

Cation-exchange capacity is the total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. Soils having a low cation-exchange capacity hold fewer cations and may require more frequent applications of fertilizer than soils having a high cation-exchange capacity. Soils having a high cation-exchange capacity can retain cations. The ability to retain cations helps to prevent the pollution of ground water.

Soil reaction is a measure of acidity or alkalinity and is expressed as a range in pH values. The range in pH of each major horizon is based on many field tests. For many soils, values have been verified by laboratory analyses. Soil reaction is important in selecting crops and other plants, in evaluating soil amendments for fertility and stabilization, and in determining the risk of corrosion.

Calcium carbonate equivalent is the percent of carbonates, by weight, in the soil. The availability of plant nutrients is influenced by the amount of carbonates in the soil. Incorporating nitrogen fertilizer into calcareous soils helps to prevent nitrite accumulation and ammonium-N volatilization.

Gypsum is given as the percent, by weight, of hydrated calcium sulfates in the soil. Gypsum is partially soluble in water and can be dissolved and removed by water. Soils that have a high content of gypsum (more than 10 percent) may collapse if the gypsum is removed by percolating water.

Salinity is a measure of soluble salts in the soil at saturation. It is expressed as the electrical conductivity of the saturation extract, in millimhos per centimeter at 25 degrees C. Estimates are based on field and laboratory measurements at representative sites of nonirrigated soils. The salinity of irrigated soils is affected by the quality of the irrigation water and by the frequency of water

application. Hence, the salinity of soils in individual fields can differ greatly from the value given in the table. Salinity affects the suitability of a soil for crop production, the stability of the soil if used as construction material, and the potential of the soil to corrode metal and concrete.

Sodium adsorption ratio is the measure of sodium relative to calcium and magnesium in the water extract from saturated soil paste. Soils having a sodium adsorption ratio of 13 or more may be characterized by an increased dispersion of organic matter and clay particles, reduced permeability and aeration, and a general degradation of soil structure.

Water Features

Table 14, "Water Features" gives estimates of various water features. The estimates are used in land use planning that involves engineering considerations.

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The four hydrologic soil groups are:

Group A.##Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B.##Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C.##Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D.##Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas.

The *months* in the table indicate the portion of the year in which the feature is most likely to be a concern.

Water table refers to a saturated zone in the soil. Table 14, Water Features," indicates, by month, depth to the top

(*upper limit*) and base (*lower limit*) of the saturated zone in most years. Estimates of the upper and lower limits are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors or mottles (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

Ponding is standing water in a closed depression. Unless a drainage system is installed, the water is removed only by percolation, transpiration, or evaporation. Table 14, "Water Features," indicates *surface water depth* and the *duration* and *frequency* of ponding. Duration is expressed as *very brief* if less than 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days.

Frequency is expressed as none, rare, occasional, and frequent. *None* means that ponding is not probable; *rare* that it is unlikely but possible under unusual weather conditions (the chance of ponding is nearly 0 percent to 5 percent in any year); *occasional* that it occurs, on the average, once or less in 2 years (the chance of ponding is 5 to 50 percent in any year); and *frequent* that it occurs, on the average, more than once in 2 years (the chance of ponding is more than 50 percent in any year).

Flooding is the temporary inundation of an area caused by overflowing streams, by runoff from adjacent slopes, or by tides. Water standing for short periods after rainfall or snowmelt is not considered flooding, and water standing in swamps and marshes is considered ponding rather than flooding.

Duration and *frequency* are estimated. Duration is expressed as *extremely brief* if 0.1 hour to 4 hours, *very brief* if 4 hours to 2 days, *brief* if 2 to 7 days, *long* if 7 to 30 days, and *very long* if more than 30 days. Frequency is expressed as none, very rare, rare, occasional, frequent, and very frequent. *None* means that flooding is not probable; *very rare* that it is very unlikely but possible under extremely unusual weather conditions (the chance of flooding is less than 1 percent in any year); *rare* that it is unlikely but possible under unusual weather conditions (the chance of flooding is 1 to 5 percent in any year); *occasional* that it occurs infrequently under normal weather conditions (the chance of flooding is 5 to 50 percent in any year); *frequent* that it is likely to occur often under normal weather conditions (the chance of flooding is more than 50 percent in any year but is less than 50 percent in all months in any year); and *very frequent* that it is likely to occur very often under normal weather conditions (the chance of flooding is more than 50 percent in all months of any year).

The information is based on evidence in the soil profile, namely thin strata of gravel, sand, silt, or clay deposited by floodwater; irregular decrease in organic matter content with increasing depth; and little or no horizon development.

Also considered are local information about the extent and levels of flooding and the relation of each soil on the landscape to historic floods. Information on the extent of flooding based on soil data is less specific than that provided by detailed engineering surveys that delineate flood-prone areas at specific flood frequency levels.

Soil Features

Table 15, "Soil Features," gives estimates of various soil features. The estimates are used in land use planning that involves engineering considerations.

A *restrictive layer* is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers. The table indicates the hardness and thickness of the restrictive layer, both of which significantly affect the ease of excavation. *Depth to top* is the vertical distance from the soil surface to the upper boundary of the restrictive layer.

Potential for frost action is the likelihood of upward or lateral expansion of the soil caused by the formation of segregated ice lenses (frost heave) and the subsequent collapse of the soil and loss of strength on thawing. Frost action occurs when moisture moves into the freezing zone of the soil. Temperature, texture, density, permeability, content of organic matter, and depth to the water table are the most important factors considered in evaluating the

potential for frost action. It is assumed that the soil is not insulated by vegetation or snow and is not artificially drained. Silty and highly structured, clayey soils that have a high water table in winter are the most susceptible to frost action. Well drained, very gravelly, or very sandy soils are the least susceptible. Frost heave and low soil strength during thawing cause damage to pavements and other rigid structures.

Risk of corrosion pertains to potential soil-induced electrochemical or chemical action that corrodes or weakens uncoated steel or concrete. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution, acidity, and electrical conductivity of the soil. The rate of corrosion of concrete is based mainly on the sulfate and sodium content, texture, moisture content, and acidity of the soil. Special site examination and design may be needed if the combination of factors results in a severe hazard of corrosion. The steel or concrete in installations that intersect soil boundaries or soil layers is more susceptible to corrosion than the steel or concrete in installations that are entirely within one kind of soil or within one soil layer.

For uncoated steel, the risk of corrosion, expressed as *low*, *moderate*, or *high*, is based on soil drainage class, total acidity, electrical resistivity near field capacity, and electrical conductivity of the saturation extract.

For concrete, the risk of corrosion also is expressed as *low*, *moderate*, or *high*. It is based on soil texture, acidity, and amount of sulfates in the saturation extract.

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Glossary

Aeration, soil. The exchange of air in soil with air from the atmosphere. The air in a well aerated soil is similar to that in the atmosphere; the air in a poorly aerated soil is considerably higher in carbon dioxide and lower in oxygen.

Aggregate, soil. Many fine particles held in a single mass or cluster. Natural soil aggregates, such as granules, blocks, or prisms, are called peds. Clods are aggregates produced by tillage or logging.

Alkali (sodic) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Alluvial cone. The material washed down the sides of mountains and hills by ephemeral streams and deposited at the mouth of gorges in the form of a moderately steep, conical mass descending equally in all directions from the point of issue.

Alluvial fan. The fanlike deposit of a stream where it issues from a narrow valley upon a plain, or of a tributary stream near or at its junction with its main stream.

Alluvial flat. A nearly level, graded, alluvial surface in bolsons and semi-bolsons. Commonly, an alluvial flat does not manifest terraces or floodplain levels.

Alluvium. Material, such as sand, silt, or clay, deposited on land by streams.

Alpha,alpha-dipyridyl. A dye that when dissolved in 1N ammonium acetate is used to detect the presence of reduced iron (Fe II) in the soil. A positive reaction indicates a type of redoximorphic feature.

Animal unit month (AUM). The amount of forage required by one mature cow of approximately 1,000 pounds weight, with or without a calf, for 1 month.

Aquic conditions. Current soil wetness characterized by saturation, reduction, and redoximorphic features.

Area reclaim (in tables). An area difficult to reclaim after the removal of soil for construction and other uses. Revegetation and erosion control are extremely difficult.

Argillic horizon. A subsoil horizon characterized by an accumulation of illuvial clay.

Argillite. Weakly metamorphosed mudstone or shale.

Arroyo. The flat-floored channel of an ephemeral stream, commonly with very steep to vertical banks cut in alluvium.

Aspect. The direction in which a slope faces.

Association, soil. A group of soils or miscellaneous areas geographically associated in a characteristic repeating pattern and defined and delineated as a single map unit.

Available water capacity (available moisture capacity).

The capacity of soils to hold water available for use by most plants. It is commonly defined as the difference between the amount of soil water at field moisture capacity and the amount at wilting point. It is commonly expressed as inches of water per inch of soil. The capacity, in inches, in a 60-inch profile or to a limiting layer is expressed as:

Very low	0 to 3.5
Low	3.5 to 5
Moderate	5 to 7.5
High	more than 7.5

Avalanche chute. The track or path formed by an avalanche.

Back slope. The geomorphic component that forms the steepest inclined surface and principal element of many hillsides. Back slopes in profile are commonly steep, are linear, and may or may not include cliff segments.

Backswamp. A floodplain landform of extensive, marshy, or swampy, depressed areas of flood plains between natural levees and valley sides or terraces.

Badland. Steep or very steep, commonly nonstony, barren land dissected by many intermittent drainage channels. Badland is most common in semiarid and arid regions where streams are entrenched in soft geologic material. Local relief generally ranges from 25 to 500 feet. Runoff potential is very high, and geologic erosion is active.

Ballena. A fan remnant having a distinctively-rounded surface of fan alluvium. The ballena's broadly rounded shoulders meet from either side to form a narrow summit and merge smoothly with concave, short pediments which form smoothly-rounded drainageways between adjacent ballenas. A partial ballena is a fan remnant large enough to retain some relict fan surface on a remnant summit.

Barrier beach. A wide gently sloping portion of a bolson floor comprising numerous, parallel, relict longshore-bars and lagoons built by a receding pluvial lake.

Basal area. The area of a cross section of a tree, generally referring to the section at breast height and measured outside the bark. It is a measure of stand density, commonly expressed in square feet.

Base saturation. The degree to which material having cation-exchange properties is saturated with exchangeable bases (sum of Ca, Mg, Na, K), expressed as a percentage of the total cation-exchange capacity.

Basin floor. A general term for the nearly level, lower-most part of intermontane basins (i.e., bolson, semi-bolsos). The basin floor includes all of the alluvial, eolian, and erosional landforms below the piedmont slope.

Beach terrace. The relict shorelines from pluvial lakes, generally restricted to valley sides.

Bedding planes. Fine strata, less than 5 millimeters thick, in unconsolidated alluvial, eolian, lacustrine, or marine sediment.

Bedding system. A drainage system made by plowing, grading, or otherwise shaping the surface of a flat field. It consists of a series of low ridges separated by shallow, parallel dead furrows.

Bedrock. The solid rock that underlies the soil and other unconsolidated material or that is exposed at the surface.

Bedrock-controlled topography. A landscape where the configuration and relief of the landforms are determined or strongly influenced by the underlying bedrock.

Bench terrace. A raised, level or nearly level strip of earth constructed on or nearly on a contour, supported by a barrier of rocks or similar material, and designed to make the soil suitable for tillage and to prevent accelerated erosion.

Bisequum. Two sequences of soil horizons, each of which consists of an illuvial horizon and the overlying eluvial horizons.

Blowout. A shallow depression from which all or most of the soil material has been removed by wind. A blowout has a flat or irregular floor formed by a

resistant layer or by an accumulation of pebbles or cobbles. In some blowouts, the water table is exposed.

Board foot. A unit of measure of the wood in lumber, logs, or trees. The amount of wood in a board one foot wide, one foot long, and one inch thick before finishing.

Bolson. A landscape term for an internally drained intermontane basin into which drainages from surrounding mountains converge inward toward a central depression.

Boulders. Rock fragments larger than 2 feet (60 centimeters) in diameter.

Breaks. The steep and very steep broken land at the border of an upland summit that is dissected by ravines.

Breast height. An average height of 4.5 feet above the ground surface; the point on a tree where diameter measurements are ordinarily taken.

Brush management. Use of mechanical, chemical, or biological methods to make conditions favorable for reseeding or to reduce or eliminate competition from woody vegetation and thus allow understory grasses and forbs to recover. Brush management increases forage production and thus reduces the hazard of erosion. It can improve the habitat for some species of wildlife.

Butte. An isolated small mountain or hill with steep or precipitous sides and a top variously flat, rounded, or pointed that may be a residual mass isolated by erosion or an exposed volcanic neck.

Calcareous soil. A soil containing enough calcium carbonate (commonly combined with magnesium carbonate) to effervesce visibly when treated with cold, dilute hydrochloric acid.

Caldera. A large, more or less circular depression, formed by explosion and/or collapse, which surrounds a volcanic vent or vents, and whose diameter is much greater than that of the included vent, or vents.

Caliche. A more or less cemented deposit of calcium carbonate in soils of warm-temperate, subhumid to arid areas. Caliche occurs as soft, thin layers in the soil or as hard, thick beds directly beneath the solum, or it is exposed at the surface by erosion.

California bearing ratio (CBR). The load-supporting capacity of a soil as compared to that of a standard crushed limestone, expressed as a ratio. First standardized in California. A soil having a CBR of 16 supports 16 percent of the load that would be supported by standard crushed limestone, per unit area, with the same degree of distortion.

Canopy. The leafy crown of trees or shrubs. (See Crown.)

Canyon. A long, deep, narrow, very steep sided valley with high, precipitous walls in an area of high local relief.

Capillary water. Water held as a film around soil particles and in tiny spaces between particles. Surface tension is the adhesive force that holds capillary water in the soil.

Catena. A sequence, or "chain," of soils on a landscape that formed in similar kinds of parent material but have different characteristics as a result of differences in relief and drainage.

Cation. An ion carrying a positive charge of electricity. The common soil cations are calcium, potassium, magnesium, sodium, and hydrogen.

Cation-exchange capacity. The total amount of exchangeable cations that can be held by the soil, expressed in terms of milliequivalents per 100 grams of soil at neutrality (pH 7.0) or at some other stated pH value. The term, as applied to soils, is synonymous with base-exchange capacity but is more precise in meaning.

Channeled. Refers to a drainage area in which natural meandering or repeated branching and convergence of a streambed have created deeply incised cuts, either active or abandoned, in alluvial material.

Channery soil material. Soil material that is, by volume, 15 to 35 percent thin, flat fragments of sandstone, shale, slate, limestone, or schist as much as 6 inches (15 centimeters) along the longest axis. A single piece is called a channer.

Chemical treatment. Control of unwanted vegetation through the use of chemicals.

Chiseling. Tillage with an implement having one or more soil-penetrating points that shatter or loosen hard, compacted layers to a depth below normal plow depth.

Clay. As a soil separate, the mineral soil particles less than 0.002 millimeter in diameter. As a soil textural class, soil material that is 40 percent or more clay, less than 45 percent sand, and less than 40 percent silt.

Clay depletions. Low-chroma zones having a low content of iron, manganese, and clay because of the chemical reduction of iron and manganese and the removal of iron, manganese, and clay. A type of redoximorphic depletion.

Clayey soil. Silty clay, sandy clay, or clay.

Clay film. A thin coating of oriented clay on the surface of a soil aggregate or lining pores or root channels. Synonyms: clay coating, clay skin.

Claypan. A slowly permeable soil horizon that contains much more clay than the horizons above it. A claypan

is commonly hard when dry and plastic or stiff when wet.

Clearcut. A method of forest harvesting that removes the entire stand of trees in one cutting. Reproduction is achieved artificially or by natural seeding from adjacent stands.

Climax plant community. The stabilized plant community on a particular site. The plant cover reproduces itself and does not change so long as the environment remains the same.

Closed depression. A low area completely surrounded by higher ground and having no natural outlet.

Coarse fragments. Mineral or rock particles larger than 2 millimeters in diameter.

Coarse textured soil. Sand or loamy sand.

Cobble (or cobblestone). A rounded, partly rounded, or angular fragment of rock 3 to 10 inches (7.6 to 25 centimeters) in diameter.

Cobbly soil material. Material that is 15 to 35 percent, by volume, rounded or partially rounded rock fragments 3 to 10 inches (7.6 to 25 centimeters) in diameter. Very cobbly soil material is 35 to 60 percent of these rock fragments, and extremely cobbly soil material is more than 60 percent.

Codominant trees. Trees whose crowns form the general level of the forest canopy and that receive full light from above but comparatively little from the sides.

Colluvium. Unconsolidated, unsorted earth material moved and deposited by mass movement on sideslopes and at the base of slopes.

Commercial forest. Forest land capable of producing 20 cubic feet or more per acre per year at the culmination of mean annual increment.

Complex slope. Irregular or variable slope. Planning or establishing terraces, diversions, and other water-control structures on a complex slope is difficult.

Complex, soil. A map unit of two or more kinds of soil or miscellaneous areas in such an intricate pattern or so small in area that it is not practical to map them separately at the selected scale of mapping. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas.

Compressible (in tables). Excessive decrease in volume of soft soil under load.

Concretions. Cemented bodies with crude internal symmetry organized around a point, a line, or a plane that typically takes the form of concentric layers visible to the naked eye. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up concretions. If formed in place, concretions of iron oxide or manganese oxide are generally considered a type of redoximorphic concentration.

Conglomerate. A coarse grained, clastic rock composed of rounded to subangular rock fragments more than 2 millimeters in diameter. It commonly has a matrix of sand and finer textured material. Conglomerate is the consolidated equivalent of gravel.

Conservation cropping system. Growing crops in combination with needed cultural and management practices. In a good conservation cropping system, the soil-improving crops and practices more than offset the soil-depleting crops and practices. Cropping systems are needed on all tilled soils. Soil-improving practices in a conservation cropping system include the use of rotations that contain grasses and legumes and the return of crop residue to the soil. Other practices include the use of green manure crops of grasses and legumes, proper tillage, adequate fertilization, and weed and pest control.

Conservation tillage. A tillage system that does not invert the soil and that leaves a protective amount of crop residue on the surface throughout the year.

Consistence, soil. Refers to the degree of cohesion and adhesion of soil material and its resistance to deformation when ruptured. Consistence includes resistance of soil material to rupture and to penetration; plasticity, toughness, and stickiness of puddled soil material; and the manner in which the soil material behaves when subject to compression. Terms describing consistence are defined in the "Soil Survey Manual."

Contour stripcropping. Growing crops in strips that follow the contour. Strips of grass or close-growing crops are alternated with strips of clean-tilled crops or summer fallow.

Control section. The part of the soil on which classification is based. The thickness varies among different kinds of soil, but, for many, it is that part of the soil profile between depths of 10 inches and 40 or 80 inches.

Coprogenous earth (sedimentary peat). Fecal material deposited in water by aquatic organisms.

Corrosion. Soil-induced electrochemical or chemical action that dissolves or weakens concrete or uncoated steel.

Cover crop. A close-growing crop grown primarily to improve and protect the soil between periods of regular crop production, or a crop grown between trees and vines in orchards and vineyards.

Cropping system. Growing crops according to a planned system of rotation and management practices.

Crop residue management. Returning crop residue to the soil, which helps to maintain soil structure, organic matter content, and fertility and helps to control erosion.

Cross-slope farming. Deliberately conducting farming operations on sloping farmland in such a way that tillage is across the general slope.

Crown. The upper part of a tree or shrub, including the living branches and their foliage.

Cuesta. A hill or ridge that has a gentle slope on one side and a steep slope on the other; specifically, an asymmetric, homoclinal ridge capped by resistant rock layers of slight or moderate dip.

Culmination of the mean annual increment (CMAI).

The average annual increase per acre in the volume of a stand. Computed by dividing the total volume of the stand by its age. As the stand increases in age, the mean annual increment continues to increase until mortality begins to reduce the rate of increase. The point where the stand reaches its maximum annual rate of growth is called the culmination of the mean annual increment.

Cutbanks cave (in tables). The walls of excavations tend to cave in or slough.

Decreasers. The most heavily grazed climax range plants. Because they are the most palatable, they are the first to be destroyed by overgrazing.

Deep soil. A soil that is 40 to 60 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Deferred grazing. Postponing grazing or resting grazing land for a prescribed period.

Delta. A body of alluvium having a surface that is nearly flat and fan shaped, deposited at or near the mouth of a river or stream where it enters a body of relatively quiet water, generally a sea or lake.

Dense layer (in tables). A very firm, massive layer that has a bulk density of more than 1.8 grams per cubic centimeter. Such a layer affects the ease of digging and can affect filling and compacting.

Depth, soil. Generally, the thickness of the soil over bedrock. Very deep soils are more than 60 inches deep over bedrock; deep soils, 40 to 60 inches; moderately deep, 20 to 40 inches; shallow, 10 to 20 inches; and very shallow, less than 10 inches.

Depth to rock (in tables). Bedrock is too near the surface for the specified use.

Desert pavement. On a desert surface, a layer of gravel or larger fragments that was emplaced by upward movement of the underlying sediments or that remains after finer particles have been removed by running water or the wind.

Dip slope. A slope of the land surface, roughly determined by and approximately conforming to the dip of the underlying bedrock.

Diversion (or diversion terrace). A ridge of earth, generally a terrace, built to protect downslope areas by diverting runoff from its natural course.

Divided-slope farming. A form of field stripcropping in which crops are grown in a systematic arrangement of two strips, or bands, across the slope to reduce the hazard of water erosion. One strip is in a close-growing crop that provides protection from erosion, and the other strip is in a crop that provides less protection from erosion. This practice is used where slopes are not long enough to permit a full stripcropping pattern to be used.

Dominant trees. Trees whose crowns form the general level of the forest canopy and that receive full light from above and from the sides.

Drainage class (natural). Refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized: excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Drainage, surface. Runoff, or surface flow of water, from an area.

Drainageway. An area of ground at a lower elevation than the surrounding ground and in which water collects and is drained to a closed depression or lake or to a drainageway at a lower elevation. A drainageway may or may not have distinctly incised channels at its upper reaches or throughout its course.

Duff. A generally firm organic layer on the surface of mineral soils. It consists of fallen plant material that is in the process of decomposition and includes everything from the litter on the surface to underlying pure humus.

Dune. A mound, ridge, or hill of loose, windblown granular material (generally sand), either bare or covered with vegetation.

Ecological Site. A distinctive kind of rangeland or grazed forestland that has a unique historic potential native plant community. Ecological sites are the products of all the environmental factors that affect their development. An ecological site is capable of supporting a native plant community that has a unique kind and/or proportion of species or total vegetative production. Ecological sites in grazed forestland include both overstory and understory vegetation.

Effervescence. The quality of a soil measured when drops of diluted (1:10) hydrochloric acid (HCL) are added to the soil. The ratings are as follows:

Very slightly effervescent..... few bubbles
Slightly effervescent..... bubbles readily
Strongly effervescent..... bubbles form low foam
Violently effervescent..... bubbles form thick foam quickly

Eluviation. The movement of material in true solution or colloidal suspension from one place to another within the soil. Soil horizons that have lost material through eluviation are eluvial; those that have received material are illuvial.

Endosaturation. A type of saturation of the soil in which all horizons between the upper boundary of saturation and a depth of 2 meters are saturated.

Eolian soil material. Earthy parent material accumulated through wind action; commonly refers to sandy material in dunes or to loess in blankets on the surface.

Ephemeral stream. A stream, or reach of a stream, that flows only in direct response to precipitation. It receives no long-continued supply from melting snow or other source, and its channel is above the water table at all times.

Episaturation. A type of saturation indicating a perched water table in a soil in which saturated layers are underlain by one or more unsaturated layers within 2 meters of the surface.

Erosion. The wearing away of the land surface by water, wind, ice, or other geologic agents and by such processes as gravitational creep.

Erosion (geologic). Erosion caused by geologic processes acting over long geologic periods and resulting in the wearing away of mountains and the building up of such landscape features as flood plains and coastal plains. Synonym: natural erosion.

Erosion (accelerated). Erosion much more rapid than geologic erosion, mainly as a result of human or animal activities or of a catastrophe in nature, such as a fire, that exposes the surface.

Erosion pavement. A layer of gravel or stones that remains on the surface after fine particles are removed by sheet or rill erosion.

Escarpment. A relatively continuous and steep slope or cliff breaking the general continuity of more gently sloping land surfaces and resulting from erosion or faulting. Synonym: scarp.

Even aged. Refers to a stand of trees in which only small differences in age occur between the individuals. A range of 20 years is allowed.

Excess alkali (in tables). Excess exchangeable sodium in

the soil. The resulting poor physical properties restrict the growth of plants.

Excess fines (in tables). Excess silt and clay in the soil.

The soil does not provide a source of gravel or sand for construction purposes.

Excess lime (in tables). Excess carbonates in the soil that restrict the growth of some plants.

Excess salts (in tables). Excess water-soluble salts in the soil that restrict the growth of most plants.

Excess sodium (in tables). Excess exchangeable sodium in the soil. The resulting poor physical properties restrict the growth of plants.

Excess sulfur (in tables). Excessive amount of sulfur in the soil. The sulfur causes extreme acidity if the soil is drained, and the growth of most plants is restricted.

Extrusive rock. Igneous rock derived from deep-seated molten matter (magma) emplaced on the earth's surface.

Fallow. Cropland left idle in order to restore productivity through accumulation of moisture. Summer fallow is common in regions of limited rainfall where cereal grain is grown. The soil is tilled for at least one growing season for weed control and decomposition of plant residue.

Fan apron. A sheet-like mantle of relatively young alluvium covering part of an older fan piedmont surface. It somewhere buries a soil that can be traced to the edge of the fan apron.

Fan piedmont. The most extensive landform on piedmont slopes, formed by the coalescence of alluvial fans or accretions of fan aprons into one generally smooth slope.

Fan remnant. A general term for landforms that are remaining parts of older fan-landforms, that either have been dissected or partially buried.

Fan skirt. The zone of smooth, laterally-coalescing, small alluvial fans that issue from gullies cut into the fan piedmont or that are the coalescing extensions of inset fans of the fan piedmont, and that merge with the basin floor.

Fast intake (in tables). The rapid movement of water into the soil.

Fertility, soil. The quality that enables a soil to provide plant nutrients, in adequate amounts and in proper balance, for the growth of specified plants when light, moisture, temperature, tilth, and other growth factors are favorable.

Fibric soil material (peat). The least decomposed of all organic soil material. Peat contains a large amount of well preserved fiber that is readily identifiable according to botanical origin. Peat has the lowest bulk density and the highest water content at saturation of all organic soil material.

Field moisture capacity. The moisture content of a soil, expressed as a percentage of the oven-dry weight, after the gravitational, or free, water has drained away; the field moisture content 2 or 3 days after a soaking rain; also called *normal field capacity*, *normal moisture capacity*, or *capillary capacity*.

Fill slope. A sloping surface consisting of excavated soil material from a road cut. It commonly is on the downhill side of the road.

Fine textured soil. Sandy clay, silty clay, or clay.

Firebreak. An area cleared of flammable material to stop or help control creeping or running fires. It also serves as a line from which to work and to facilitate the movement of fire fighters and equipment. Designated roads also serve as firebreaks.

First bottom. The normal flood plain of a stream, subject to frequent or occasional flooding.

Flaggy soil material. Material that is, by volume, 15 to 35 percent flagstones. Very flaggy soil material is 35 to 60 percent flagstones, and extremely flaggy soil material is more than 60 percent flagstones.

Flagstone. A thin fragment of sandstone, limestone, slate, shale, or (rarely) schist 6 to 15 inches (15 to 38 centimeters) long.

Flood plain. A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Fluvial. Of or pertaining to rivers; produced by river action, as a fluvial plain.

Foothill. A steeply sloping upland that has relief of as much as 1,000 feet (300 meters) and fringes a mountain range or high-plateau escarpment.

Foot slope. The inclined surface at the base of a hill.

Forb. Any herbaceous plant not a grass or a sedge.

Forest cover. All trees and other woody plants (underbrush) covering the ground in a forest.

Fragile (in tables). A soil that is easily damaged by use or disturbance.

Frost action (in tables). Freezing and thawing of soil moisture. Frost action can damage roads, buildings and other structures, and plant roots.

Genesis, soil. The mode of origin of the soil. Refers especially to the processes or soil-forming factors responsible for the formation of the solum, or true soil, from the unconsolidated parent material.

Gilgai. The microrelief of clayey soils that shrink and swell considerably with changes in moisture content. Usually manifested as a succession of microbasins and microknolls in nearly level areas or of microvalleys and microridges parallel with the slope.

Gleyed soil. Soil that formed under poor drainage, resulting in the reduction of iron and other elements in the profile and in gray colors.

Graded stripcropping. Growing crops in strips that grade toward a protected waterway.

Grassed waterway. A natural or constructed waterway, typically broad and shallow, seeded to grass as protection against erosion. Conducts surface water away from cropland.

Gravel. Rounded or angular fragments of rock as much as 3 inches (2 millimeters to 7.6 centimeters) in diameter. An individual piece is a pebble.

Gravelly soil material. Material that is 15 to 50 percent, by volume, rounded or angular rock fragments, not prominently flattened, as much as 3 inches (7.6 centimeters) in diameter.

Green manure crop (agronomy). A soil-improving crop grown to be plowed under in an early stage of maturity or soon after maturity.

Ground water. Water filling all the unblocked pores of underlying material below the water table.

Gully. A miniature valley with steep sides cut by running water and through which water ordinarily runs only after rainfall. The distinction between a gully and a rill is one of depth. A gully generally is an obstacle to farm machinery and is too deep to be obliterated by ordinary tillage; a rill is of lesser depth and can be smoothed over by ordinary tillage.

Gypsum. A mineral consisting of hydrous calcium sulfate.

Hard bedrock. Bedrock that cannot be excavated except by blasting or by the use of special equipment that is not commonly used in construction.

Hardpan. A hardened or cemented soil horizon, or layer. The soil material is sandy, loamy, or clayey and is cemented by iron oxide, silica, calcium carbonate, or other substance.

Heavy metal. Inorganic substances that are solid at ordinary temperatures and are not soluble in water. They form oxides and hydroxides that are basic. Examples are copper, iron, cadmium, zinc, manganese, lead, and arsenic.

Hemic soil material (mucky peat). Organic soil material intermediate in degree of decomposition between the less decomposed fibric material and the more decomposed sapric material.

High-residue crops. Such crops as small grain and corn used for grain. If properly managed, residue from these crops can be used to control erosion until the next crop in the rotation is established. These crops return large amounts of organic matter to the soil.

Hill. A natural elevation of the land surface, rising as much as 1,000 feet above surrounding lowlands, commonly of limited summit area and having a well defined outline; hillsides generally have slopes of more than 15 percent. The distinction between a hill and a mountain is arbitrary and is dependent on local usage.

Holocene. The epoch of the Quaternary Period of geologic time, extending from the end of the Pleistocene Epoch (about 10 to 12 thousand years ago) to the present.

Horizon, soil. A layer of soil, approximately parallel to the surface, having distinct characteristics produced by soil-forming processes. In the identification of soil horizons, an uppercase letter represents the major horizons. Numbers or lowercase letters that follow represent subdivisions of the major horizons. The major horizons of mineral soil are as follows:

O horizon.--An organic layer of fresh and decaying plant residue.

A horizon.--The mineral horizon at or near the surface in which an accumulation of humified organic matter is mixed with the mineral material. Also, a plowed surface horizon, most of which was originally part of a B horizon.

E horizon.--The mineral horizon in which the main feature is loss of silicate clay, iron, aluminum, or some combination of these.

B horizon.--The mineral horizon below an A horizon. The B horizon is in part a layer of transition from the overlying A to the underlying C horizon. The B horizon also has distinctive characteristics, such as (1) accumulation of clay, sesquioxides, humus, or a combination of these; (2) prismatic or blocky structure; (3) redder or browner colors than those in the A horizon; or (4) a combination of these.

C horizon.--The mineral horizon or layer, excluding indurated bedrock, that is little affected by soil-forming processes and does not have the properties typical of the overlying soil material. The material of a C horizon may be either like or unlike that in which the solum formed. If the material is known to differ from that in the solum, an Arabic numeral, commonly a 2, precedes the letter C.

Cr horizon.--Soft, consolidated bedrock beneath the soil.

R layer.--Consolidated bedrock beneath the soil. The bedrock commonly underlies a C horizon, but it can be directly below an A or a B horizon.

Humus. The well decomposed, more or less stable part of the organic matter in mineral soils.

Hydrologic soil groups. Refers to soils grouped according to their runoff potential. The soil properties that influence this potential are those that affect the minimum rate of water infiltration on a bare soil during periods after prolonged wetting when the soil is not frozen. These properties are depth to a seasonal high water table, the infiltration rate and permeability after prolonged wetting, and depth to a very slowly permeable layer. The slope and the kind

of plant cover are not considered but are separate factors in predicting runoff.

Igneous rock. Rock formed by solidification from a molten or partially molten state. Major varieties include plutonic and volcanic rock. Examples are andesite, basalt, and granite.

Illuviation. The movement of soil material from one horizon to another in the soil profile. Generally, material is removed from an upper horizon and deposited in a lower horizon.

Impervious soil. A soil through which water, air, or roots penetrate slowly or not at all. No soil is absolutely impervious to air and water all the time.

Increasesers. Species in the climax vegetation that increase in amount as the more desirable plants are reduced by close grazing. Increasesers commonly are the shorter plants and less palatable to livestock.

Infiltration. The downward entry of water into the immediate surface of soil or other material, as contrasted with percolation, which is movement of water through soil layers or material.

Infiltration capacity. The maximum rate at which water can infiltrate into a soil under a given set of conditions.

Infiltration rate. The rate at which water penetrates the surface of the soil at any given instant, usually expressed in inches per hour. The rate can be limited by the infiltration capacity of the soil or the rate at which water is applied at the surface.

Inset fan. A special case of the flood plain of an ephemeral stream that is confined between fan remnants, basin-floor remnants, ballenas, or closely opposed fan toeslopes.

Intake rate. The average rate of water entering the soil under irrigation. Most soils have a fast initial rate; the rate decreases with application time. Therefore, intake rate for design purposes is not a constant but is a variable depending on the net irrigation application. The rate of water intake, in inches per hour, is expressed as follows:

Less than 0.2.....	very low
0.2 to 0.4	low
0.4 to 0.75	moderately low
0.75 to 1.25	moderate
1.25 to 1.75	moderately high
1.75 to 2.5	high
More than 2.5	very high

Intermittent stream. A stream, or reach of a stream, that flows for prolonged periods only when it receives groundwater discharge or long, continued contributions from melting snow or other surface and shallow subsurface sources.

Intermontane basin. A generic term for wide structural depressions between mountain ranges that are partly

filled with alluvium. They may be drained internally (bolsons) or externally (semi-bolsons).

Invaders. On range, plants that encroach into an area and grow after the climax vegetation has been reduced by grazing. Generally, plants invade following disturbance of the surface.

Iron depletions. Low-chroma zones having a low content of iron and manganese oxide because of chemical reduction and removal, but having a clay content similar to that of the adjacent matrix. A type of redoximorphic depletion.

Irrigation. Application of water to soils to assist in production of crops. Methods of irrigation are:

Basin.--Water is applied rapidly to nearly level plains surrounded by levees or dikes.

Border.--Water is applied at the upper end of a strip in which the lateral flow of water is controlled by small earth ridges called border dikes or borders.

Controlled flooding.--Water is released at intervals from closely spaced field ditches and distributed uniformly over the field.

Corrugation.--Water is applied to small, closely spaced furrows or ditches in fields of close-growing crops or in orchards so that it flows in only one direction.

Drip (or trickle).--Water is applied slowly and under low pressure to the surface of the soil or into the soil through such applicators as emitters, porous tubing, or perforated pipe.

Furrow.--Water is applied in small ditches made by cultivation implements. Furrows are used for tree and row crops.

Sprinkler.--Water is sprayed over the soil surface through pipes or nozzles from a pressure system.

Subirrigation.--Water is applied in open ditches or tile lines until the water table is raised enough to wet the soil.

Wild flooding.--Water, released at high points, is allowed to flow onto an area without controlled distribution.

Lacustrine deposit. Material deposited in lake water and exposed when the water level is lowered or the elevation of the land is raised.

Lagoon. The nearly level, filled depression behind the longshore bar on a barrier beach.

Lake plain. A surface marking the floor of an extinct lake, filled in by well sorted, stratified sediments.

Lake terrace. The narrow shelf produced along a lake shore and later exposed when the water recedes.

Lamella. A thin, generally horizontal layer of fine material illuviated within a very much thicker, coarser, eluviated layer.

- Landform.** Any recognizable form or feature on the earth's surface, having a characteristic shape, and produced by natural causes that provide an empirical description of similar portions of the earth's surface.
- Landscape.** A collection of related, natural landforms.
- Landslide.** The rapid downhill movement of a mass of soil and loose rock, generally when wet or saturated. The speed and distance of movement, as well as the amount of soil and rock material, vary greatly.
- Large stones** (in tables). Rock fragments 3 inches (7.6 centimeters) or more across. Large stones adversely affect the specified use of the soil.
- Leaching.** The removal of soluble material from soil or other material by percolating water.
- Liquid limit.** The moisture content at which the soil passes from a plastic to a liquid state.
- Loam.** Soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles.
- Loamy soil.** Coarse sandy loam, sandy loam, fine sandy loam, very fine sandy loam, loam, silt loam, silt, clay loam, sandy clay loam, or silty clay loam.
- Loess.** Fine grained material, dominantly of silt-sized particles, deposited by wind.
- Longshore bar.** A narrow, elongate, coarse-textured ridge, built by the wave action of a pluvial lake, that extends parallel to the shore and separated it from a lagoon; both the bar and lagoon are now relict features.
- Low-residue crops.** Such crops as corn used for silage, peas, beans, and potatoes. Residue from these crops is not adequate to control erosion until the next crop in the rotation is established. These crops return little organic matter to the soil.
- Low strength.** The soil is not strong enough to support loads.
- Marl.** An earthy, unconsolidated deposit consisting chiefly of calcium carbonate mixed with clay in approximately equal amounts.
- Masses.** Concentrations of substances in the soil matrix that do not have a clearly defined boundary with the surrounding soil material and cannot be removed as a discrete unit. Common compounds making up masses are calcium carbonate, gypsum or other soluble salts, iron oxide, and manganese oxide. Masses consisting of iron oxide or manganese oxide generally are considered a type of redoximorphic concentration.
- Mean annual increment (MAI).** The average annual increase in volume of a tree during the entire life of the tree.
- Mechanical treatment.** Use of mechanical equipment for seeding, brush management, and other management practices.
- Medium textured soil.** Very fine sandy loam, loam, silt loam, or silt.
- Merchantable trees.** Trees that are of sufficient size to be economically processed into wood products.
- Metamorphic rock.** Rock of any origin altered in mineralogical composition, chemical composition, or structure by heat, pressure, and movement. Nearly all such rocks are crystalline.
- Mineral soil.** Soil that is mainly mineral material and low in organic material. Its bulk density is more than that of organic soil.
- Minimum tillage.** Only the tillage essential to crop production and prevention of soil damage.
- Miscellaneous area.** An area that has little or no natural soil and supports little or no vegetation.
- Moderately coarse textured soil.** Coarse sandy loam, sandy loam, or fine sandy loam.
- Moderately deep soil.** A soil that is 20 to 40 inches deep over bedrock or to other material that restricts the penetration of plant roots.
- Moderately fine textured soil.** Clay loam, sandy clay loam, or silty clay loam.
- Mollic epipedon.** A thick, dark, humus-rich surface horizon (or horizons) that has high base saturation and pedogenic soil structure. It may include the upper part of the subsoil.
- Morphology, soil.** The physical makeup of the soil, including the texture, structure, porosity, consistence, color, and other physical, mineral, and biological properties of the various horizons, and the thickness and arrangement of those horizons in the soil profile.
- Mottling, soil.** Irregular spots of different colors that vary in number and size. Descriptive terms are as follows: abundance--*few*, *common*, and *many*; size--*fine*, *medium*, and *coarse*; and contrast--*faint*, *distinct*, and *prominent*. The size measurements are of the diameter along the greatest dimension. *Fine* indicates less than 5 millimeters (about 0.2 inch); *medium*, from 5 to 15 millimeters (about 0.2 to 0.6 inch); and *coarse*, more than 15 millimeters (about 0.6 inch).
- Mountain.** A natural elevation of the land surface, rising more than 1,000 feet above surrounding lowlands, commonly of restricted summit area (relative to a plateau) and generally having steep sides. A mountain can occur as a single, isolated mass or in a group forming a chain or range.
- Muck.** Dark, finely divided, well decomposed organic soil material. (See Sapric soil material.)
- Mudstone.** Sedimentary rock formed by induration of silt and clay in approximately equal amounts.
- Munsell notation.** A designation of color by degrees of three simple variables--hue, value, and chroma. For example, a notation of 10YR 6/4 is a color with hue of 10YR, value of 6, and chroma of 4.

Natric horizon. A special kind of argillic horizon that contains enough exchangeable sodium to have an adverse effect on the physical condition of the subsoil.

Neutral soil. A soil having a pH value between 6.6 and 7.3. (See Reaction, soil.)

Nodules. Cemented bodies lacking visible internal structure. Calcium carbonate, iron oxide, and manganese oxide are common compounds making up nodules. If formed in place, nodules of iron oxide or manganese oxide are considered types of redoximorphic concentrations.

Nutrient, plant. Any element taken in by a plant essential to its growth. Plant nutrients are mainly nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, iron, manganese, copper, boron, and zinc obtained from the soil and carbon, hydrogen, and oxygen obtained from the air and water.

Observed rooting depth. Depth to which roots have been observed to penetrate.

Organic matter. Plant and animal residue in the soil in various stages of decomposition.

Overstory. The trees in a forest that form the upper crown cover.

Oxbow. The horseshoe-shaped channel of a former meander, remaining after the stream formed a cutoff across a narrow meander neck.

Pan. A compact, dense layer in a soil that impedes the movement of water and the growth of roots. For example, *hardpan*, *fragipan*, *claypan*, *plowpan*, and *traffic pan*.

Parent material. The unconsolidated organic and mineral material in which soil forms.

Parna dune. An eolian dune built of sand size aggregates of clayey material that commonly occurs leeward of a playa.

Peat. Unconsolidated material, largely undecomposed organic matter, that has accumulated under excess moisture. (See Fibric soil material.)

Ped. An individual natural soil aggregate, such as a granule, a prism, or a block.

Pediment. A gently sloping erosional surface developed at the foot of a receding hill or mountain slope.

Pedisediment. A thin layer of alluvial material that mantles an erosion surface and has been transported to its present position from higher lying areas of the erosion surface.

Pedon. The smallest volume that can be called "a soil." A pedon is three dimensional and large enough to permit study of all horizons. Its area ranges from about 10 to 100 square feet (1 square meter to 10 square meters), depending on the variability of the soil.

Percolation. The downward movement of water through the soil.

Percs slowly (in tables). The slow movement of water through the soil adversely affects the specified use.

Permeability. The quality of the soil that enables water or air to move downward through the profile. The rate at which a saturated soil transmits water is accepted as a measure of this quality. In soil physics, the rate is referred to as "saturated hydraulic conductivity," which is defined in the "Soil Survey Manual." In line with conventional usage in the engineering profession and with traditional usage in published soil surveys, this rate of flow continues to be expressed as "permeability." Terms describing permeability, measured in inches per hour, are as follows:

Extremely slow.....	0.00 to 0.01 inch
Very slow.....	0.01 to 0.06 inch
Slow.....	0.06 to 0.2 inch
Moderately slow.....	0.2 to 0.6 inch
Moderate.....	0.6 inch to 2.0 inches
Moderately rapid.....	2.0 to 6.0 inches
Rapid.....	6.0 to 20 inches
Very rapid.....	more than 20 inches

Phase, soil. A subdivision of a soil series based on features that affect its use and management, such as slope, stoniness, and flooding.

pH value. A numerical designation of acidity and alkalinity in soil. (See Reaction, soil.)

Piedmont slope. The dominant slope at the foot of a mountain. Main components of the piedmont slope include pediments, alluvial fans, fan piedmonts, fan skirts and inset fans.

Piping (in tables). Formation of subsurface tunnels or pipelike cavities by water moving through the soil.

Pitting (in tables). Pits caused by melting around ice. They form on the soil after plant cover is removed.

Plasticity index. The numerical difference between the liquid limit and the plastic limit; the range of moisture content within which the soil remains plastic.

Plastic limit. The moisture content at which a soil changes from semisolid to plastic.

Plateau. An extensive upland mass with relatively flat summit area that is considerably elevated (more than 100 meters) above adjacent lowlands and separated from them on one or more sides by escarpments.

Playa. The generally dry and nearly level lake plain that occupies the lowest parts of closed depressional areas, such as those on intermontane basin floors. Temporary flooding occurs primarily in response to precipitation and runoff.

Pleistocene. The epoch of the Quaternary Period of geologic time preceding the Holocene (from approximately 2 million to 10 thousand years ago).

Plowpan. A compacted layer formed in the soil directly below the plowed layer.

Pluvial. Relating to former periods of abundant rains.

Ponding. Standing water on soils in closed depressions. Unless the soils are artificially drained, the water can be removed only by percolation or evapotranspiration.

Poor filter (in tables). Because of rapid or very rapid permeability, the soil may not adequately filter effluent from a waste disposal system.

Poorly graded. Refers to a coarse grained soil or soil material consisting mainly of particles of nearly the same size. Because there is little difference in size of the particles, density can be increased only slightly by compaction.

Poor outlets (in tables). Refers to areas where surface or subsurface drainage outlets are difficult or expensive to install.

Potential native plant community. See Climax plant community.

Potential rooting depth (effective rooting depth). Depth to which roots could penetrate if the content of moisture in the soil were adequate. The soil has no properties restricting the penetration of roots to this depth.

Prescribed burning. Deliberately burning an area for specific management purposes, under the appropriate conditions of weather and soil moisture and at the proper time of day.

Productivity, soil. The capability of a soil for producing a specified plant or sequence of plants under specific management.

Profile, soil. A vertical section of the soil extending through all its horizons and into the parent material.

Proper grazing use. Grazing at an intensity that maintains enough cover to protect the soil and maintain or improve the quantity and quality of the desirable vegetation. This practice increases the vigor and reproduction capacity of the key plants and promotes the accumulation of litter and mulch necessary to conserve soil and water.

Quartzite, metamorphic. Rock consisting mainly of quartz that formed through recrystallization of quartz-rich sandstone or chert.

Quaternary. The period of geologic time, extending from about 2 million years ago to the present and comprising two epochs, the Pleistocene (Ice Age) and Holocene (Recent).

Quartzite, sedimentary. Very hard but unmetamorphosed sandstone consisting chiefly of quartz grains.

Range condition. The present composition of the plant community on a range site in relation to the potential natural plant community for that site. Range condition

is expressed as excellent, good, fair, or poor on the basis of how much the present plant community has departed from the potential.

Rangeland. Land on which the potential natural vegetation is predominantly grasses, grasslike plants, forbs, or shrubs suitable for grazing or browsing. It includes natural grasslands, savannas, many wetlands, some deserts, tundras, and areas that support certain forb and shrub communities.

Range site. An area of rangeland where climate, soil, and relief are sufficiently uniform to produce a distinct natural plant community. A range site is the product of all the environmental factors responsible for its development. It is typified by an association of species that differ from those on other range sites in kind or proportion of species or total production.

Reaction, soil. A measure of acidity or alkalinity of a soil, expressed in pH values. A soil that tests to pH 7.0 is described as precisely neutral in reaction because it is neither acid nor alkaline. The degrees of acidity or alkalinity, expressed as pH values, are:

Ultra acid	less than 3.5
Extremely acid	3.5 to 4.4
Very strongly acid	4.5 to 5.0
Strongly acid	5.1 to 5.5
Moderately acid	5.6 to 6.0
Slightly acid	6.1 to 6.5
Neutral	6.6 to 7.3
Slightly alkaline..... (mildly alkaline).....	7.4 to 7.8
Moderately alkaline.....	7.9 to 8.4
Strongly alkaline.....	8.5 to 9.0
Very strongly alkaline.....	9.1 and higher

Redoximorphic concentrations. Nodules, concretions, soft masses, pore linings, and other features resulting from the accumulation of iron or manganese oxide. An indication of chemical reduction and oxidation resulting from saturation.

Redoximorphic depletions. Low-chroma zones from which iron and manganese oxide or a combination of iron and manganese oxide and clay has been removed. These zones are indications of the chemical reduction of iron resulting from saturation.

Redoximorphic features. Redoximorphic concentrations, redoximorphic depletions, reduced matrices, a positive reaction to alpha,alpha-dipyridyl, and other features indicating the chemical reduction and oxidation of iron and manganese compounds resulting from saturation.

Reduced matrix. A soil matrix that has low chroma in situ because of chemically reduced iron (Fe II). The chemical reduction results from nearly continuous wetness. The matrix undergoes a change in hue or chroma within 30 minutes after exposure to air as the iron is oxidized (Fe III). A type of redoximorphic feature.

Regeneration. The new growth of a natural plant community, developing from seed.

Regolith. The unconsolidated mantle of weathered rock and soil material on the earth's surface; the loose earth material above the solid rock.

Relict stream terrace. One of a series of platforms in or adjacent to a stream valley that formed prior to the current stream system.

Relief. The elevations or inequalities of a land surface, considered collectively.

Residuum (residual soil material). Unconsolidated, weathered or partly weathered mineral material that accumulated as consolidated rock disintegrated in place.

Rill. A steep-sided channel resulting from accelerated erosion. A rill is generally a few inches deep and not wide enough to be an obstacle to farm machinery.

Riverwash. Unstable areas of sandy, silty, clayey, or gravelly sediments. These areas are flooded, washed, and reworked by rivers so frequently that they support little or no vegetation.

Road cut. A sloping surface produced by mechanical means during road construction. It is commonly on the uphill side of the road.

Rock fragments. Rock or mineral fragments having a diameter of 2 millimeters or more; for example, pebbles, cobbles, stones, and boulders.

Rock outcrop. Exposures of bare bedrock other than lava flows and rock-lined pits.

Rooting depth (in tables). Shallow root zone. The soil is shallow over a layer that greatly restricts roots.

Root zone. The part of the soil that can be penetrated by plant roots.

Rubble land. Areas that have more than 90 percent of the surface covered by stones or boulders. Voids contain no soil material and virtually no vegetation other than lichens. The areas commonly are at the base of mountain slopes, but some are on mountain slopes as deposits of cobbles, stones, and boulders left by Pleistocene glaciation or by periglacial phenomena.

Runoff. The precipitation discharged into stream channels from an area. The water that flows off the surface of the land without sinking into the soil is called surface runoff. Water that enters the soil before reaching surface streams is called groundwater runoff or seepage flow from ground water.

Saline soil. A soil containing soluble salts in an amount that impairs the growth of plants. A saline soil does not contain excess exchangeable sodium.

Salinity. The electrical conductivity of a saline soil. It is expressed, in millimhos per centimeter, as follows:

Nonsaline	0 to 2
Very slightly saline.....	2 to 4
Slightly saline	4 to 8

Moderately saline.....	8 to 16
Strongly saline.....	More than 16

Salty water (in tables). Water that is too salty for consumption by livestock.

Sand. As a soil separate, individual rock or mineral fragments from 0.05 millimeter to 2.0 millimeters in diameter. Most sand grains consist of quartz. As a soil textural class, a soil that is 85 percent or more sand and not more than 10 percent clay.

Sand sheet. A large, irregularly shaped, surficial mantle of eolian sand.

Sandstone. Sedimentary rock containing dominantly sand-sized particles.

Sandy soil. Sand or loamy sand.

Sapric soil material (muck). The most highly decomposed of all organic soil material. Muck has the least amount of plant fiber, the highest bulk density, and the lowest water content at saturation of all organic soil material.

Saprolite. Unconsolidated residual material underlying the soil and grading to hard bedrock below.

Saturation. Wetness characterized by zero or positive pressure of the soil water. Under conditions of saturation, the water will flow from the soil matrix into an unlined auger hole.

Sawlogs. Logs of suitable size and quality for the production of lumber.

Scarification. The act of abrading, scratching, loosening, crushing, or modifying the surface to increase water absorption or to provide a more tillable soil.

Scribner's log rule. A method of estimating the number of board feet that can be cut from a log of a given diameter and length.

Second bottom. The first terrace above the normal flood plain (or first bottom) of a river.

Sedimentary rock. Rock made up of particles deposited from suspension in water. The chief kinds of sedimentary rock are conglomerate, formed from gravel; sandstone, formed from sand; shale, formed from clay; and limestone, formed from soft masses of calcium carbonate. There are many intermediate types. Some wind-deposited sand is consolidated into sandstone.

Seepage (in tables). The movement of water through the soil. Seepage adversely affects the specified use.

Semi-bolson. An intermontane basin that is drained externally by an intermittent stream.

Sequum. A sequence consisting of an illuvial horizon and the overlying eluvial horizon. (See Eluviation.)

Series, soil. A group of soils that have profiles that are almost alike, except for differences in texture of the surface layer. All the soils of a series have horizons that are similar in composition, thickness, and arrangement.

Shale. Sedimentary rock formed by the hardening of a clay deposit.

Shallow soil. A soil that is 10 to 20 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Sheet erosion. The removal of a fairly uniform layer of soil material from the land surface by the action of rainfall and surface runoff.

Shelterwood system. A forest management system requiring the removal of a stand in a series of cuts so that regeneration occurs under a partial canopy. After regeneration, a final cut removes the shelterwood and allows the stand to develop in the open as an even-aged stand. The system is well suited to sites where shelter is needed for regeneration, and it can aid regeneration of the more intolerant tree species in a stand.

Shoulder slope. The uppermost inclined surface at the top of a hillside. It is the transition zone from the back slope to the summit of a hill or mountain. The surface is dominantly convex in profile and erosional in origin.

Shrink-swell (in tables). The shrinking of soil when dry and the swelling when wet. Shrinking and swelling can damage roads, dams, building foundations, and other structures. It can also damage plant roots.

Shrub-coppice dune. A small dune that forms around shrubs or small trees.

Silica. A combination of silicon and oxygen. The mineral form is called quartz.

Silt. As a soil separate, individual mineral particles that range in diameter from the upper limit of clay (0.002 millimeter) to the lower limit of very fine sand (0.05 millimeter). As a soil textural class, soil that is 80 percent or more silt and less than 12 percent clay.

Siltstone. Sedimentary rock made up of dominantly silt-sized particles.

Similar soils. Soils that share limits of diagnostic criteria, behave and perform in a similar manner, and have similar conservation needs or management requirements for the major land uses in the survey area.

Sinkhole. A depression in the landscape where limestone has been dissolved.

Site class. A grouping of site indexes into five to seven production capability levels. Each level can be represented by a site curve.

Site curve (50-year). A set of related curves on a graph that shows the average height of dominant or dominant and codominant trees for the range of ages on soils that differ in productivity. Each level is represented by a curve. The basis of the curves is the height of dominant or dominant and codominant trees that are 50 years old or are 50 years old at breast height.

Site curve (100-year). A set of related curves on a graph that shows the average height of dominant or dominant and codominant trees for a range of ages on soils that differ in productivity. Each level is represented by a curve. The basis of the curves is the height of dominant or dominant and codominant trees that are 100 years old or are 100 years old at breast height.

Site index. A designation of the quality of a forest site based on the height of the dominant stand at an arbitrarily chosen age. For example, if the average height attained by dominant and codominant trees in a fully stocked stand at the age of 50 years is 75 feet, the site index is 75.

Skid trails. Pathways along which logs are dragged to a common site for loading onto a logging truck.

Slash. The branches, bark, treetops, reject logs, and broken or uprooted trees left on the ground after logging.

Slickens. Accumulations of fine-textured material, such as material separated in placer-mine and ore-mill operations. Slickens from ore mills commonly consist of freshly ground rock that has undergone chemical treatment during the milling process.

Slickensides. Polished and grooved surfaces produced by one mass sliding past another. In soils, slickensides may occur at the bases of slip surfaces on the steeper slopes; on faces of blocks, prisms, and columns; and in swelling clayey soils, where there is marked change in moisture content.

Slick spot. A small area of soil having a puddled, crusted, or smooth surface and an excess of exchangeable sodium. The soil generally is silty or clayey, is slippery when wet, and is low in productivity.

Slippage (in tables). Soil mass susceptible to movement downslope when loaded, excavated, or wet.

Slope. The inclination of the land surface from the horizontal. Percentage of slope is the vertical distance divided by horizontal distance, then multiplied by 100. Thus, a slope of 20 percent is a drop of 20 feet in 100 feet of horizontal distance. In this survey, the following slope classes are recognized:

Nearly level.....	0 to 2 percent
Gently sloping	2 to 4 percent
Moderately sloping	4 to 8 percent
Strongly sloping.....	8 to 15 percent
Moderately steep.....	15 to 30 percent
Steep.....	30 to 50 percent
Very steep	50 to 75 percent
Extremely steep.....	75 percent and higher

Slope (in tables). Slope is great enough that special practices are required to ensure satisfactory performance of the soil for a specific use.

Slow intake (in tables). The slow movement of water into the soil.

Slow refill (in tables). The slow filling of ponds, resulting from restricted permeability in the soil.

Small stones (in tables). Rock fragments less than 3 inches (7.6 centimeters) in diameter. Small stones adversely affect the specified use of the soil.

Sodic (alkali) soil. A soil having so high a degree of alkalinity (pH 8.5 or higher) or so high a percentage of exchangeable sodium (15 percent or more of the total exchangeable bases), or both, that plant growth is restricted.

Sodicity. The degree to which a soil is affected by exchangeable sodium. Sodicity is expressed as a sodium adsorption ratio (SAR) of a saturation extract, or the ratio of Na^+ to $Ca^{++} + Mg^{++}$. The degrees of sodicity and their respective ratios are:

Very slight	5-12:1
Slight.....	13-30:1
Moderate.....	31-45:1
Strong	46-90:1
Very strong.....	more than 90:1

Soft bedrock. Bedrock that can be excavated with trenching machines, backhoes, small rippers, and other equipment commonly used in construction.

Soil. A natural, three-dimensional body at the earth's surface. It is capable of supporting plants and has properties resulting from the integrated effect of climate and living matter acting on earthy parent material, as conditioned by relief over periods of time.

Soil separates. Mineral particles less than 2 millimeters in equivalent diameter and ranging between specified size limits. The names and sizes, in millimeters, of separates recognized in the United States are as follows:

Very coarse sand	2.0 to 1.0
Coarse sand.....	1.0 to 0.5
Medium sand.....	0.5 to 0.25
Fine sand	0.25 to 0.10
Very fine sand	0.10 to 0.05
Silt.....	0.05 to 0.002
Clay.....	less than 0.002

Solum. The upper part of a soil profile, above the C horizon, in which the processes of soil formation are active. The solum in soil consists of the A, E, and B horizons. Generally, the characteristics of the material in these horizons are unlike those of the material below the solum. The living roots and plant and animal activities are largely confined to the solum.

Species. A single, distinct kind of plant or animal having certain distinguishing characteristics.

Stone line. A concentration of coarse fragments in a soil. Generally, it is indicative of an old weathered surface. In a cross section, the line may be one fragment or more thick. It generally overlies material that weathered in place and is overlain by recent sediment of variable thickness.

Stones. Rock fragments 10 to 24 inches (25 to 60 centimeters) in diameter if rounded or 15 to 24 inches (38 to 60 centimeters) in length if flat.

Stony. Refers to a soil containing stones in numbers that interfere with or prevent tillage.

Strath terrace. A surface cut formed by the erosion of hard or semiconsolidated bedrock and thinly mantled with stream deposits.

Stream channel. The hollow bed where a natural stream of surface water flows or may flow; the deepest or central part of the bed, formed by the main current and covered more or less continuously by water.

Stream terrace. One of a series of platforms in a stream valley, flanking and more or less parallel to the stream channel. It originally formed near the level of the stream and is the dissected remnants of an abandoned flood plain, streambed, or valley floor that were produced during a former stage of erosion or deposition.

Stripcropping. Growing crops in a systematic arrangement of strips or bands that provide vegetative barriers to soil blowing and water erosion.

Structure, soil. The arrangement of primary soil particles into compound particles or aggregates. The principal forms of soil structure are: *platy* (laminated), *prismatic* (vertical axis of aggregates longer than horizontal), *columnar* (prisms with rounded tops), *blocky* (angular or subangular), and *granular*. *Structureless* soils are either *single grain* (each grain by itself, as in dune sand) or *massive* (the particles adhering without any regular cleavage, as in many hardpans).

Stubble mulch. Stubble or other crop residue left on the soil or partly worked into the soil. It protects the soil from wind and water erosion after harvest, during preparation of a seedbed for the next crop, and during the early growing period of the new crop.

Subsoil. Technically, the B horizon; roughly, the part of the solum below plow depth.

Subsoiling. Tilling a soil below normal plow depth, ordinarily to shatter a hardpan or claypan.

Substratum. The part of the soil below the solum.

Subsurface layer. Any surface soil horizon (A, E, AB, or EB) below the surface layer.

Summer fallow. The tillage of uncropped land during the summer to control weeds and allow storage of moisture in the soil for the growth of a later crop. A practice common in semiarid regions, where annual

precipitation is not enough to produce a crop every year. Summer fallow is frequently practiced before planting winter grain.

Summit. A general term for the top, or highest level, of an upland feature, such as a hill or mountain. It commonly refers to a higher area that has a gentle slope and is flanked by steeper slopes.

Surface layer. The soil ordinarily moved in tillage, or its equivalent in uncultivated soil, ranging in depth from 4 to 10 inches (10 to 25 centimeters). Frequently designated as the "plow layer" or the "Ap horizon."

Surface soil. The A, E, AB, and EB horizons, considered collectively. It includes all subdivisions of these horizons.

Tailwater. The water directly downstream of a structure.

Talus. Fragments of rock and other soil material accumulated by gravity at the foot of cliffs or steep slopes.

Taxadjuncts. Soils that cannot be classified in a series recognized in the classification system. Such soils are named for a series they strongly resemble and are designated as taxadjuncts to that series because they differ in ways too small to be of consequence in interpreting their use and behavior. Soils are recognized as taxadjuncts only when one or more of their characteristics are slightly outside the range defined for the family of the series for which the soils are named.

Terrace. An embankment, or ridge, constructed across sloping soils on the contour or at a slight angle to the contour. The terrace intercepts surface runoff so that water soaks into the soil or flows slowly to a prepared outlet. A terrace in a field is generally built so that the field can be farmed. A terrace intended mainly for drainage has a deep channel that is maintained in permanent sod.

Terrace (geologic). A step-like surface, ordinarily flat or undulating, bordering a river, a lake, or the sea representing a former flood plain.

Texture, soil. The relative proportions of sand, silt, and clay particles in a mass of soil. The basic textural classes, in order of increasing proportion of fine particles, are *sand*, *loamy sand*, *sandy loam*, *loam*, *silt loam*, *silt*, *sandy clay loam*, *clay loam*, *silty clay loam*, *sandy clay*, *silty clay*, and *clay*. The sand, loamy sand, and sandy loam classes may be further divided by specifying "coarse," "fine," or "very fine."

Thin layer (in tables). Otherwise suitable soil material too thin for the specified use.

Till plain. An extensive area of nearly level to undulating soils underlain by glacial till.

Tilth, soil. The physical condition of the soil as related to tillage, seedbed preparation, seedling emergence, and root penetration.

Toe slope. The outermost inclined surface at the base of a hill; part of a foot slope.

Too arid (in tables). The soil is dry most of the time, and vegetation is difficult to establish.

Topsoil. The upper part of the soil, which is the most favorable material for plant growth. It is ordinarily rich in organic matter and is used to topdress roadbanks, lawns, and land affected by mining.

Toxicity (in tables). Excessive amount of toxic substances, such as sodium or sulfur, that severely hinder establishment of vegetation or severely restrict plant growth.

Trace elements. Chemical elements, for example, zinc, cobalt, manganese, copper, and iron, in soils in extremely small amounts. They are essential to plant growth.

Trafficability. The degree to which a soil is capable of supporting vehicular traffic across a wide range in soil moisture conditions.

Tread. The relatively flat terrace surface that was cut or built by stream or wave action.

Tuff. A compacted deposit that is 50 percent or more volcanic ash and dust.

Understory. Any plants in a forest community that grow to a height of less than 5 feet.

Unstable fill (in tables). Risk of caving or sloughing on banks of fill material.

Upland (geology). Land at a higher elevation, in general, than the alluvial plain or stream terrace; land above the lowlands along streams.

Valley. An elongated depressional area primarily developed by stream action.

Valley fill. In glaciated regions, material deposited in stream valleys by glacial meltwater. In nonglaciated regions, alluvium deposited by heavily loaded streams.

Variegation. Refers to patterns of contrasting colors assumed to be inherited from the parent material rather than to be the result of poor drainage.

Very deep soil. A soil that is more than 60 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Very shallow soil. A soil that is less than 10 inches deep over bedrock or to other material that restricts the penetration of plant roots.

Water bars. Smooth, shallow ditches or depressional areas that are excavated at an angle across a sloping road. They are used to reduce the downward velocity of water and divert it off and away from the road surface. Water bars can easily be driven over if constructed properly.

Waterspreading. Diverting runoff from natural channels by means of a system of dams, dikes, or ditches and spreading it over relatively flat surfaces.

Water supplying capacity. The total amount of water available in the soil for plant growth in a normal year from precipitation and from runoff from higher areas. Runoff and water lost to deep percolation are not included.

Weathering. All physical and chemical changes produced in rocks or other deposits at or near the earth's surface by atmospheric agents. These changes result in disintegration and decomposition of the material.

Well graded. Refers to soil material consisting of coarse grained particles that are well distributed over a wide

range in size or diameter. Such soil normally can be easily increased in density and bearing properties by compaction. Contrasts with poorly graded soil.

Wilting point (or permanent wilting point). The moisture content of soil, on an oven-dry basis, at which a plant (specifically, a sunflower) wilts so much that it does not recover when placed in a humid, dark chamber.

Windthrow. The uprooting and tipping over of trees by the wind.

TABLES

TABLE 1.--TEMPERATURE AND PRECIPITATION

(Recorded in the period 1966-90 at Amargosa Farms - Garey 0150)

Month	Temperature (Degrees F.)						Precipitation (Inches)			
	Average daily maximum	Average daily minimum	Average daily	2 years in 10 will have--		Average growing degree days*	Average	2 years in 10 will have		Average number of days with 0.10 inch or more
				Maximum temperature higher than--	Minimum temperature lower than--			less than	more than	
January---	60.2	30.8	45.5	75	15	192	0.64	0.16	1.21	1
February--	65.2	34.1	49.7	83	17	279	0.62	0.13	1.16	1
March-----	70.8	38.6	54.7	88	24	456	0.62	0.29	1.55	1
April-----	78.9	44.5	61.7	97	30	628	0.28	0.06	0.64	0
May-----	88.9	53.7	71.3	104	37	940	0.24	0.16	0.61	0
June-----	98.0	62.5	80.2	110	44	1,191	0.05	0.04	0.28	0
July-----	103.2	67.9	85.5	113	53	1,390	0.40	0.08	1.11	0
August-----	101.0	66.5	83.7	112	52	1,353	0.66	0.12	1.63	1
September--	94.0	58.1	76.0	106	42	1,078	0.15	0.08	0.36	0
October----	83.1	47.6	65.4	99	31	776	0.12	0.06	0.32	0
November---	69.1	36.2	52.6	86	22	378	0.44	0.30	0.96	1
December---	61.0	29.5	45.2	76	14	185	0.48	0.15	1.25	1
Yearly:										
Average--	81.1	47.5	64.3	----	----	----	---	---	---	---
Extreme--	116	7	---	114	11	----	---	---	---	---
Total----	---	---	---	----	----	8,848	4.70	1.78	6.04	6

*A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees F).

TABLE 1.--TEMPERATURE AND PRECIPITATION

(Recorded in the period 1973-90 at Beatty 8 N, 0718)

Month	Temperature (Degrees F.)						Precipitation (Inches)			
	Average daily maximum	Average daily minimum	Average daily	2 years in 10 will have--		Average number of growing degree days*	Average	2 years in 10 will have		Average number of days with 0.10 inch or more
				Maximum temperature higher than--	Minimum temperature lower than--			less than	more than	
January---	53.2	28.5	40.9	70	10	103	0.75	0.50	1.40	2
February--	58.3	31.2	44.7	77	13	162	0.81	0.18	1.48	2
March-----	62.1	34.4	48.2	79	20	259	1.00	0.30	1.68	2
April-----	71.2	39.6	55.4	89	26	463	0.41	0.08	0.96	1
May-----	80.5	47.7	64.1	97	33	744	0.38	0.07	0.66	1
June-----	91.0	54.9	72.9	104	40	988	0.11	0.10	0.30	0
July-----	96.4	60.0	78.2	108	45	1,182	0.36	0.11	0.75	1
August-----	94.1	58.3	76.2	106	46	1,118	0.51	0.10	1.02	1
September--	87.2	52.9	70.1	101	39	896	0.51	0.09	0.96	1
October---	77.2	44.0	60.6	94	28	624	0.32	0.08	0.70	1
November--	63.0	33.5	48.3	80	15	263	0.50	0.10	0.93	1
December--	55.1	28.4	41.7	72	13	117	0.49	0.10	0.96	1
Yearly:										
Average-	74.1	42.8	58.4	----	----	----	---	---	---	---
Extreme-	112	4	---	109	7	----	---	---	---	---
Total---	---	---	---	----	----	6,919	6.16	2.34	8.67	14

*A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees F).

TABLE 1.--TEMPERATURE AND PRECIPITATION

(Recorded in the period 1949-90 at Pahrump University of Nevada Lab, 5890)

Month	Temperature (Degrees F.)						Precipitation (Inches)			
	Average daily maximum	Average daily minimum	Average daily	2 years in 10 will have--		Average number of growing degree days*	Average	2 years in 10 will have		Average number of days with 0.10 inch or more
				Maximum temperature higher than--	Minimum temperature lower than--			less than	more than	
January---	57.1	26.4	41.8	77	7	112	0.58	0.24	1.12	1
February--	62.7	31.8	47.3	80	15	207	0.71	0.19	1.42	1
March-----	67.5	36.5	52.0	85	21	353	0.52	0.10	1.09	1
April-----	75.7	43.1	59.4	93	27	551	0.33	0.05	0.70	0
May-----	84.9	51.3	68.1	102	35	817	0.24	0.09	0.62	0
June-----	95.5	60.0	77.7	109	44	1,072	0.06	0.02	0.34	0
July-----	101.5	67.2	84.3	112	53	1,300	0.23	0.06	0.57	0
August-----	99.6	65.7	82.6	110	50	1,262	0.40	0.15	1.02	0
September--	92.0	56.5	74.3	106	39	965	0.29	0.05	0.60	0
October---	81.4	45.0	63.2	98	27	697	0.20	0.05	0.49	0
November---	67.0	33.5	50.2	84	15	280	0.52	0.11	1.07	1
December---	58.3	26.4	42.4	74	11	113	0.44	0.13	0.98	1
Yearly:										
Average--	78.6	45.3	61.9	----	----	----	----	----	----	----
Extreme--	115	4	---	113	7	----	----	----	----	----
Total---	---	---	---	----	----	7,729	4.53	1.66	5.91	5

*A growing degree day is a unit of heat available for plant growth. It can be calculated by adding the maximum and minimum daily temperatures, dividing the sum by 2, and subtracting the temperature below which growth is minimal for the principal crops in the area (40 degrees F).

TABLE 2.--FREEZE DATES IN SPRING AND FALL

(Recorded in the period 1966-90 at Amargosa Farms - Garey, 0150)

Probability	Temperature		
	24 degrees F. or lower	28 degrees F. or lower	32 degrees F. or lower
Last freezing temperature in spring:			
1 year in 10 later than--	March 6	March 18	April 10
2 years in 10 later than--	February 25	March 10	April 3
5 years in 10 later than--	February 7	February 23	March 21
First freezing temperature in fall:			
1 year in 10 earlier than--	November 14	November 6	October 20
2 years in 10 earlier than--	November 19	November 12	October 26
5 years in 10 earlier than--	November 29	November 24	November 7

TABLE 2.--FREEZE DATES IN SPRING AND FALL

(Recorded in the period 1973-90 at Beatty 8 N, 0718)

Probability	Temperature		
	24 degrees F. or lower	28 degrees F. or lower	32 degrees F. or lower
Last freezing temperature in spring:			
1 year in 10 later than--	April 4	April 27	May 11
2 years in 10 later than--	March 24	April 18	May 4
5 years in 10 later than--	March 1	April 2	April 22
First freezing temperature in fall:			
1 year in 10 earlier than--	November 11	October 24	October 8
2 years in 10 earlier than--	November 16	October 29	October 15
5 years in 10 earlier than--	November 23	November 9	October 27

TABLE 2.--FREEZE DATES IN SPRING AND FALL

(Recorded in the period 1949 to 1990 at Pahrump University of Nevada Lab, 5890)

Probability	Temperature		
	24 degrees F. or lower	28 degrees F. or lower	32 degrees F. or lower
Last freezing temperature in spring:			
1 year in 10 later than--	March 22	April 9	April 27
2 years in 10 later than--	March 12	March 30	April 20
5 years in 10 later than--	February 22	March 12	April 6
First freezing temperature in fall:			
1 year in 10 earlier than--	October 30	October 28	October 11
2 years in 10 earlier than--	November 6	November 3	October 17
5 years in 10 earlier than--	November 18	November 13	October 29

TABLE 3.--GROWING SEASON

(Recorded in the period 1966-90 at Amargosa Farms - Garey, 0150)

Probability	Daily Minimum Temperature during growing season		
	Higher than 24 degrees F.	Higher than 28 degrees F.	Higher than 32 degrees F.
	<u>Days</u>	<u>Days</u>	<u>Days</u>
9 years in 10	285	268	229
8 years in 10	296	277	239
5 years in 10	317	296	259
2 years in 10	338	314	279
1 year in 10	349	324	290

TABLE 3.--GROWING SEASON

(Recorded in the period 1973-90 at Beatty 8 N, 0718)

Probability	Daily Minimum Temperature during growing season		
	Higher than 24 degrees F.	Higher than 28 degrees F.	Higher than 32 degrees F.
	<u>Days</u>	<u>Days</u>	<u>Days</u>
9 years in 10	251	216	194
8 years in 10	263	227	202
5 years in 10	285	248	217
2 years in 10	307	268	232
1 year in 10	319	279	239

TABLE 3.--GROWING SEASON

(Recorded in the period 1949-90 at Pahrump University of Nevada Lab, 5890)

Probability	Daily Minimum Temperature during growing season		
	Higher than 24 degrees F.	Higher than 28 degrees F.	Higher than 32 degrees F.
	<u>Days</u>	<u>Days</u>	<u>Days</u>
9 years in 10	255	234	202
8 years in 10	266	246	213
5 years in 10	288	267	235
2 years in 10	309	289	256
1 year in 10	321	300	267

TABLE 4.--ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS

Map symbol	Soil name	Acres	percent
1314	Weiser-Wechech association-----	4,305	0.3
1315	Lastchance-Commski association-----	6,527	0.5
1316	Lastchance-Ferrogold-Commski association-----	2,432	0.2
1317	Commski-Lastchance association-----	15,486	1.2
1320	Boxspring-Zeheme-Rock outcrop association-----	4,074	0.3
1321	Boxspring-Seralin-Rock outcrop association-----	501	*
1340	Longjim-Niavi association-----	2,356	0.2
1871	Irongold-Wechech association-----	449	*
2002	Rock outcrop-Upspring-Rubble land complex, 8 to 75 percent slopes-----	18,935	1.4
2004	Rock outcrop-Zyplar association-----	1,860	0.1
2005	Rock outcrop-St. Thomas association-----	35,154	2.7
2010	Longjim gravelly fine sandy loam, 4 to 15 percent slopes-----	7,147	0.5
2011	Sanwell, warm-Sanwell complex, 0 to 4 percent slopes-----	4,992	0.4
2012	Zalda-Greyeagle-Upspring association-----	19,695	1.5
2013	Longjim-Yurm association-----	6,538	0.5
2020	Weiser-Canoto association-----	20,339	1.5
2021	Weiser-Nickel association-----	834	*
2023	Commski-Sezna association-----	1,170	*
2030	Corbilt gravelly fine sandy loam, warm, 2 to 4 percent slopes-----	4,219	0.3
2031	Corbilt-Skelon association-----	3,805	0.3
2040	Yurm-Canoto association-----	2,914	0.2
2050	Canoto-Naye association-----	482	*
2051	Yermo-Woda-Nowoy association-----	8,049	0.6
2052	Canoto very gravelly sandy loam, 2 to 4 percent slopes-----	4,421	0.3
2053	Yermo-Greyeagle-Arizo association-----	12,292	0.9
2054	Yermo, hot-Yermo-Arizo association-----	130,951	9.9
2055	Canoto association-----	3,614	0.3
2057	Yermo-Commski association-----	16,363	1.2
2058	Canoto-Nickel association-----	1,243	*
2060	Purob-Irongold association-----	5,163	0.4
2061	Vace gravelly sandy loam, 4 to 30 percent slopes-----	2,079	0.2
2062	Purob-Niavi association-----	3,612	0.3
2064	Longjim-Purob-Niavi association-----	6,660	0.5
2070	Shamock gravelly fine sandy loam, 2 to 4 percent slopes-----	12,948	1.0
2071	Shamock-Skelon association-----	2,061	0.2
2080	St. Thomas-Rock outcrop-Commski association-----	24,411	1.9
2081	St. Thomas-Tecopa-Rock outcrop complex, 15 to 75 percent slopes-----	15,781	1.2
2090	Breko-Veet association-----	5,857	0.4
2110	Pahrump fine sandy loam, 4 to 15 percent slopes-----	1,297	*
2121	Commski-Arizo association-----	3,442	0.3
2131	Upspring-Shorim-Rock outcrop association-----	3,947	0.3
2140	Jonnic-Niavi association-----	8,086	0.6
2151	Arizo-Bluepoint-Dune land complex, 0 to 4 percent slopes-----	9,947	0.8
2152	Arizo very gravelly sandy loam, moist, 0 to 2 percent slopes-----	15,614	1.2
2153	Arizo-Corbilt-Commski association-----	9,607	0.7
2161	Casaga-Nowoy complex, 2 to 4 percent slopes-----	10,529	0.8
2162	Casaga-Panor-Yermo association-----	7,555	0.6
2171	Sanwell-Skelon complex, 2 to 8 percent slopes-----	6,774	0.5
2172	Sanwell-Yermo association-----	7,805	0.6
2181	Skelon-Yermo-Pinez complex, 0 to 4 percent slopes-----	24,362	1.8
2184	Skelon-Bullfor association-----	8,197	0.6
2185	Skelon-Yermo-Ashmed complex, 4 to 15 percent slopes-----	1,559	0.1
2186	Yermo-Skelon-Pinez complex, 4 to 15 percent slopes-----	10,825	0.8
2191	Pinez-Lealandic-Arizo association-----	4,806	0.4
2201	Corbilt-Arizo complex, 2 to 4 percent slopes-----	1,409	0.1
2202	Corbilt-Migern-Arizo association-----	5,244	0.4
2204	Corbilt-Wodavar-Sanwell association-----	5,873	0.4
2212	Yermo-Bullfor association-----	7,578	0.6
2214	Yermo-Arizo association-----	12,647	1.0
2215	Yermo-Greyeagle association-----	38,476	2.9
2216	Yermo-Arizo complex, 2 to 4 percent slopes-----	3,834	0.3
2218	Sanwell-Commski association-----	2,997	0.2
2220	Canoto-Arizo complex, 2 to 4 percent slopes-----	12,879	1.0
2221	Sanwell-Greyeagle association-----	7,424	0.6

See footnote at end of table.

TABLE 4.--ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS--Continued

Map symbol	Soil name	Acres	percent
2222	Niavi-Jonnic association-----	5,939	0.5
2230	Yermo-Skelon association-----	17,193	1.3
2233	Yermo-Skelon-Bluepoint association-----	1,394	0.1
2250	Tokoper-Upspring-Rock outcrop association-----	6,878	0.5
2251	Tokoper-Downeyville-Pintwater association-----	3,285	0.2
2252	Tokoper-Blacktop association-----	5,378	0.4
2253	Tokoper-Ardivey association-----	730	*
2254	Tokoper-Downeyville-Espint association-----	2,503	0.2
2260	Greyeagle very gravelly sandy loam, 2 to 8 percent slopes-----	3,210	0.2
2261	Longjim-Yermo-Dedas association-----	1,846	0.1
2263	Greyeagle-Sanwell-Yermo association-----	5,906	0.4
2266	Greyeagle very gravelly sandy loam, 15 to 50 percent slopes-----	1,833	0.1
2267	Greyeagle-Skelon association-----	1,656	0.1
2268	Greyeagle-Arizo association-----	893	*
2269	Greyeagle-Yermo-Strozi association-----	5,051	0.4
2270	Bluepoint loamy fine sand, warm, 4 to 30 percent slopes-----	4,582	0.3
2271	Kawich-Corbilt-Wanomie complex, 0 to 2 percent slopes-----	2,922	0.2
2280	Shorim-Zalda-Upspring association-----	4,058	0.3
2281	Shorim-Yermo association-----	6,546	0.5
2282	Dedas-Orwash association-----	9,153	0.7
2290	Gabbvally-Upspring-Rubble land association-----	21,802	1.7
2291	Gabbvally-Rock outcrop association-----	7,635	0.6
2301	Tecopa-Haleburu-Rock outcrop complex, 2 to 50 percent slopes-----	5,606	0.4
2302	Tecopa-Rock outcrop-Upspring complex, 4 to 50 percent slopes-----	4,414	0.3
2304	Tecopa-Zibate-Rock outcrop association-----	19,423	1.5
2305	Tecopa-Rock outcrop association-----	2,517	0.2
2310	Nowoy-Commski association-----	6,864	0.5
2312	Commski-Tanazza association-----	1,292	*
2320	Wahguyhe-Rock outcrop-Gabbvally association-----	7,149	0.5
2341	Naye gravelly fine sandy loam, 4 to 8 percent slopes-----	4,081	0.3
2372	Zalda-Bluepoint-Rock outcrop association-----	4,438	0.3
2373	Zalda-Rubble land-Skelon complex, 8 to 30 percent slopes-----	7,064	0.5
2381	Armpup-Ashmed association-----	6,526	0.5
2391	Commski-Ashmed complex, 4 to 50 percent slopes-----	4,061	0.3
2392	Commski-Ashmed association-----	1,215	*
2393	Commski-Yermo association-----	10,228	0.8
2400	Mobl-Scottcas association-----	10,231	0.8
2401	Skelon-Bacho association-----	2,793	0.2
2421	Orwash-Wilst-Agon complex-----	10,971	0.8
2422	Orwash-Louderback-Arizo complex, 2 to 4 percent slopes-----	3,646	0.3
2423	Orwash-Greyeagle-Wanomie association-----	5,533	0.4
2425	Orwash-Yermo-Arizo association-----	2,653	0.2
2431	Zibate-Zyplar-Dedas association-----	16,695	1.3
2432	Zibate very gravelly sandy loam, 8 to 15 percent slopes-----	2,063	0.2
2434	Cruzspring-Schader-Rock outcrop association-----	7,133	0.5
2436	Zibate-Rock outcrop complex, 15 to 50 percent slopes-----	15,973	1.2
2437	Cruzspring-Rock outcrop complex, 15 to 50 percent slopes-----	4,217	0.3
2441	Lewdlac-Sanwell association-----	2,645	0.2
2451	Sanwell-Sanwell, warm-Yermo association-----	22,532	1.7
2461	Nowoy-Skelon association-----	8,447	0.6
2471	Lewdlac-Yermo association-----	1,588	0.1
2481	Bacho-Greyeagle association-----	5,736	0.4
2482	Bacho-Yermo association-----	6,158	0.5
2491	Downeyville-Blacktop-Tokoper association-----	2,591	0.2
2492	Downeyville-Silverbow-Rock outcrop association-----	525	*
2493	Downeyville-Tognoni-Stonell association-----	588	*
2494	Downeyville-Vindicator-Stewval association-----	1,741	0.1
2495	Downeyville-Gabbvally association-----	143	*
2496	Downeyville-Pintwater-Upspring association-----	12,597	1.0
2500	Commski-Greyeagle association-----	4,708	0.4
2501	Wanomie-Corbilt association-----	3,726	0.3
2510	Fuegosta-Tomel-Izo association-----	818	*
2511	Fuegosta-Wardenot-Izo association-----	564	*
2520	Vigus-Fuegosta-Izo association-----	2,424	0.2

See footnote at end of table.

TABLE 4.--ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS--Continued

Map symbol	Soil name	Acres	percent
2521	Vigus-Wardenot-Fuegosta association-----	1,494	0.1
2531	Laxal-Stonell-Unsel association-----	1,940	0.1
2532	Laxal-Fang association-----	6,014	0.5
2540	Lidan-Izo association-----	5,958	0.5
2550	Stonewall-Izo-Lidan association-----	1,892	0.1
2570	Stargo-Playas association-----	1,590	0.1
2580	Wardenot-Izo association-----	1,336	0.1
2601	Cobatus-Kawich complex, 0 to 2 percent slopes-----	2,250	0.2
2611	Corbilt very gravelly sandy loam, 0 to 8 percent slopes-----	1,966	0.1
2630	Wechech-Commski association-----	889	*
2640	Downeyville-Advokay-Pintwater association-----	1,001	*
2641	Advokay-Ardivey-Leo association-----	2,610	0.2
2642	Advokay-Blacktop association-----	2,525	0.2
2650	Luning-Wardenot-Izo association-----	2,730	0.2
2660	Stonell-Wardenot-Izo association-----	3,918	0.3
2670	Ardivey-Izo association-----	1,433	0.1
2671	Ardivey-Stonell-Izo association-----	5,754	0.4
2680	Espint-Vindicator association-----	2,745	0.2
2681	Espint-Stewval-Vindicator association-----	604	*
2682	Espint-Gabbvally-Stewval association-----	2,788	0.2
2690	Leo-Izo association-----	1,269	*
2701	Cobatus loam, drained, 0 to 2 percent slopes-----	1,696	0.1
2710	Papoose-Vindicator-Espint association-----	1,216	*
2720	Unsel-Stonell-Veet association-----	817	*
2730	Gabbvally-Blacktop-Espint association-----	1,672	0.1
2731	Gabbvally-Downeyville-Vindicator association-----	1,845	0.1
2732	Gabbvally-Tognoni-Downeyville association-----	2,653	0.2
2734	Gabbvally-Downeyville association-----	3,716	0.3
2735	Gabbvally-Wahguyhe-Rock outcrop association-----	4,249	0.3
2736	Gabbvally-Brier-Rock outcrop association-----	6,627	0.5
2740	Tognoni-Blacktop association-----	3,133	0.2
2741	Blacktop-Downeyville-Tognoni association-----	890	*
2750	Silverbow-Wardenot-Izo association-----	457	*
2760	Downeyville-Unsel-Tokoper association-----	1,899	0.1
2770	Bullfor-Panor-Bluepoint association-----	1,941	0.1
2781	Haymont-Bluepoint-Panor complex, 0 to 4 percent slopes-----	1,157	*
2810	Ashmed-Yermo-Niavi association-----	9,293	0.7
2820	Strozi-Corbilt association-----	10,539	0.8
2840	Armpup-Strozi association-----	1,925	0.1
2850	Scottcas-Yermo association-----	3,290	0.2
2860	Sezna-Yermo association-----	5,465	0.4
2870	Kanackey very gravelly loam, 15 to 50 percent slopes-----	7,758	0.6
2880	Bacho-Yermo-Arizo association-----	2,504	0.2
2890	Nopah-Woda-Gullied land association-----	2,358	0.2
2900	Playas-----	19,697	1.5
2901	Playas-Corbilt-Bluepoint association-----	4,618	0.4
2903	Playas-Mobl-Kawich complex, 0 to 4 percent slopes-----	5,667	0.4
2910	Dune land-----	1,205	*
2920	Dumps, Mine-----	165	*
2930	Seralin-Rock outcrop-Sed association-----	6,793	0.5
2940	Schader-Sed-Cruzspring association-----	9,514	0.7
2950	Pits, Gravel-----	282	*
2951	Pits, clay-----	343	*
2960	Tomel-Ardivey-Wardenot association-----	3,505	0.3
2961	Tomel-Breko-Wardenot association-----	7,056	0.5
2970	Destazo-Nowoy-Gullied land association-----	1,789	0.1
2971	Upspring very gravelly sandy loam, 8 to 15 percent slopes-----	2,859	0.2
2990	Lealandic-Ashmed association-----	1,555	0.1
3021	Casaga-Destazo-Yurm complex, 2 to 8 percent slopes-----	3,710	0.3
3022	Casaga-Woda-Yermo association-----	2,588	0.2
3052	Bobnbob-Caslo complex, 0 to 4 percent slopes-----	3,589	0.3
3101	Bluepoint-Besherm complex, 2 to 15 percent slopes-----	2,509	0.2
3120	Nowoy-Tanazza-Yurm association-----	2,551	0.2
3150	Casaga gravelly loam, 2 to 4 percent slopes-----	1,820	0.1

See footnote at end of table.

TABLE 4.--ACREAGE AND PROPORTIONATE EXTENT OF THE SOILS--Continued

Map symbol	Soil name	Acres	percent
3230	Alko-Casaga association-----	495	*
3252	Bobnbob-Cobatus complex, 0 to 2 percent slopes-----	7,256	0.6
3302	Rumpah clay-----	10,697	0.8
3313	Besherm clay loam-----	19,280	1.5
3320	Haymont very fine sandy loam, 0 to 2 percent slopes-----	12,679	1.0
3333	Nopah loam-----	15,385	1.2
4010	Tanazza-Wechech-Wodavar association-----	8,720	0.7
4030	Wechech-Nopah-Yermo association-----	216	*
4060	Besherm-Tanazza association-----	5,854	0.4
4070	Gynelle-Kawich-Cirac complex, 0 to 30 percent slopes-----	9,340	0.7
4071	Corbilt gravelly loamy fine sand, 0 to 4 percent slopes-----	41	*
4080	Water-----	379	*
	Total-----	1,319,105	100.0

* Less than 0.1 percent.

TABLE 5.--LAND CAPABILITY AND YIELDS PER ACRE OF CROPS AND PASTURE

(Yields are those that can be expected under a high level of management. They are for irrigated areas. Absence of a yield indicates that the soil is not suited to the crop or the crop generally is not grown on the soil.)

Map symbol and soil name	Land capability	Alfalfa hay	Pasture
		Tons	AUM
2054:			
Yermo-----	4s	4.50	---
Arizo-----	---	---	---
2070:			
Shamock-----	4e	5.00	---
2153:			
Arizo-----	---	---	---
Corbilt-----	4s	5.50	---
Commski-----	---	---	---
2422:			
Orwash-----	---	---	---
Louderback-----	3s	---	9.00
Arizo-----	---	---	---
2451:			
Sanwell-----	4s	6.00	---
Sanwell-----	4s	6.00	---
Yermo-----	4s	4.50	---
3022:			
Casaga-----	4s	5.50	---
Woda-----	---	---	---
Yermo-----	4s	4.50	---
3252:			
Bobnbob-----	3w	6.00	---
Cobatus-----	3w	5.50	---
3302:			
Rumpah-----	4s	5.50	---
3313:			
Besherm-----	3s	6.00	---
3320:			
Haymont-----	3s	6.00	---
3333:			
Nopah-----	3s	6.00	---

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING

Soil name and map symbol	Limitation rating	Restrictive features
1314:		
Weiser-----	Poorly suited-----	Too arid, droughty, small stones.
Wechech-----	Poorly suited-----	Too arid, droughty, small stones.
1315:		
Lastchance-----	Poorly suited-----	Too arid, droughty, small stones.
Lastchance-----	Poorly suited-----	Too arid, droughty, small stones.
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
1316:		
Lastchance-----	Poorly suited-----	Too arid, droughty, small stones.
Ferrogold-----	Poorly suited-----	Too arid, droughty, small stones.
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
1317:		
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
Lastchance-----	Poorly suited-----	Too arid, droughty, small stones.
1320:		
Boxspring-----	Poorly suited-----	Too arid, droughty, small stones.
Zeheme-----	Poorly suited-----	Too arid, droughty, small stones.
Rock Outcrop-----	Not rated-----	
1321:		
Boxspring-----	Poorly suited-----	Droughty, small stones.
Seralin-----	Poorly suited-----	Droughty, small stones, excess salt.
Rock Outcrop-----	Not rated-----	
1340:		
Longjim-----	Poorly suited-----	Too arid, droughty, small stones.
Niavi-----	Poorly suited-----	Too arid, droughty, large stones.
1871:		
Irongold-----	Poorly suited-----	Too arid, droughty.
Irongold-----	Poorly suited-----	Too arid, droughty.
Weiser-----	Poorly suited-----	Too arid.
2002:		
Rock Outcrop-----	Not rated-----	
Upspring-----	Poorly suited-----	Too arid, droughty, small stones.
Rubble Land-----	Poorly suited-----	Too arid, droughty, large stones.
2004:		
Rock Outcrop-----	Not rated-----	
Zyplar-----	Poorly suited-----	Too arid, droughty, rooting depth.
2005:		
Rock Outcrop-----	Not rated-----	
St. Thomas-----	Poorly suited-----	Too arid, droughty, small stones.
St. Thomas-----	Poorly suited-----	Too arid, droughty, small stones.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2010: Longjim-----	Poorly suited-----	Too arid, droughty.
2011: Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
2013: Longjim-----	Poorly suited-----	Too arid, droughty, small stones.
Yurm-----	Poorly suited-----	Too arid, droughty, small stones.
2020: Weiser-----	Poorly suited-----	Too arid, droughty, small stones.
Canoto-----	Poorly suited-----	Too arid, droughty, small stones.
2021: Weiser-----	Poorly suited-----	Too arid, droughty, small stones.
Nickel-----	Poorly suited-----	Too arid, droughty.
2023: Commski-----	Poorly suited-----	Too arid, droughty, small stones.
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
Sezna-----	Poorly suited-----	Too arid, droughty, small stones.
2030: Corbilt-----	Poorly suited-----	Too arid.
2031: Corbilt-----	Poorly suited-----	Too arid.
Skelon-----	Poorly suited-----	Too arid, droughty.
2040: Yurm-----	Poorly suited-----	Too arid, droughty, small stones.
Canoto-----	Poorly suited-----	Too arid, droughty, small stones.
2050: Canoto-----	Poorly suited-----	Too arid, droughty, small stones.
Naye-----	Poorly suited-----	Too arid, droughty, small stones.
2051: Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Woda-----	Poorly suited-----	Too arid, droughty, excess salt.
Nowoy-----	Poorly suited-----	Too arid, droughty.
2052: Canoto-----	Poorly suited-----	Too arid, droughty, small stones.
2053: Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
Arizo-----	Poorly suited-----	Too arid, droughty, large stones.
2054: Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2055:		
Canoto-----	Poorly suited-----	Too arid, droughty, small stones.
Canoto-----	Poorly suited-----	Too arid, droughty, small stones.
2057:		
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
2058:		
Canoto-----	Poorly suited-----	Too arid, droughty, small stones.
Nickel-----	Poorly suited-----	Too arid.
2060:		
Purob-----	Poorly suited-----	Too arid, droughty, small stones.
Irongold-----	Poorly suited-----	Too arid, droughty.
2061:		
Vace-----	Poorly suited-----	Too arid, droughty.
2062:		
Purob-----	Poorly suited-----	Too arid, droughty.
Niavi-----	Poorly suited-----	Too arid, droughty, large stones.
2064:		
Longjim-----	Poorly suited-----	Too arid, droughty, small stones.
Purob-----	Poorly suited-----	Too arid, droughty.
Niavi-----	Poorly suited-----	Too arid, droughty, large stones.
2070:		
Shamock-----	Poorly suited-----	Too arid.
2071:		
Shamock-----	Poorly suited-----	Too arid.
Skelon-----	Poorly suited-----	Too arid, droughty, small stones.
2080:		
St. Thomas-----	Poorly suited-----	Too arid, droughty, small stones.
Rock Outcrop-----	Not rated-----	
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
2081:		
St. Thomas-----	Poorly suited-----	Too arid, droughty, small stones.
Tecopa-----	Poorly suited-----	Too arid, droughty, small stones.
Rock Outcrop-----	Not rated-----	
2090:		
Breko-----	Poorly suited-----	Rooting depth.
Veet-----	Poorly suited-----	Droughty, small stones.
2110:		
Pahrump-----	Poorly suited-----	Too arid, excess salt.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2131:		
Upspring-----	Poorly suited-----	Too arid, droughty, small stones.
Shorim-----	Poorly suited-----	Too arid, droughty.
Rock Outcrop-----	Not rated-----	
2140:		
Jonnic-----	Poorly suited-----	Small stones, rooting depth.
Niavi-----	Poorly suited-----	Too arid, droughty, large stones.
2151:		
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.
Bluepoint-----	Poorly suited-----	Too arid.
Dune Land-----	Poorly suited-----	Too arid, droughty, too sandy.
2152:		
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.
2153:		
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.
Corbilt-----	Poorly suited-----	Too arid, small stones.
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
2161:		
Casaga-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Nowoy-----	Poorly suited-----	Too arid, droughty.
2162:		
Casaga-----	Poorly suited-----	Too arid, rooting depth, excess salt.
Panor-----	Poorly suited-----	Too arid, rooting depth, excess salt.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
2171:		
Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Skelon-----	Poorly suited-----	Too arid, droughty, small stones.
2172:		
Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
2181:		
Skelon-----	Poorly suited-----	Too arid, droughty.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Pinez-----	Poorly suited-----	Too arid, droughty, too sandy.
2184:		
Skelon-----	Poorly suited-----	Too arid, droughty.
Bullfor-----	Poorly suited-----	Too arid, droughty, too sandy.
2185:		
Skelon-----	Poorly suited-----	Too arid, droughty, small stones.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Ashmed-----	Poorly suited-----	Too arid, rooting depth, excess salt.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2186:		
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Skelon-----	Poorly suited-----	Too arid, droughty.
Pinez-----	Poorly suited-----	Too arid, droughty, too sandy.
2191:		
Pinez-----	Poorly suited-----	Too arid, droughty, too sandy.
Lealandic-----	Poorly suited-----	Too arid, droughty, small stones.
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.
2201:		
Corbilt-----	Poorly suited-----	Too arid, small stones.
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.
2202:		
Corbilt-----	Poorly suited-----	Too arid.
Migern-----	Poorly suited-----	Too arid.
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.
2204:		
Corbilt-----	Poorly suited-----	Too arid.
Wodavar-----	Poorly suited-----	Too arid, droughty, small stones.
Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
2214:		
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.
2215:		
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
2216:		
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Arizo-----	Poorly suited-----	Too arid, droughty, too sandy.
2218:		
Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
2220:		
Canoto-----	Poorly suited-----	Too arid, small stones.
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.
2221:		
Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
2222:		
Niavi-----	Poorly suited-----	Too arid, droughty, large stones.
Jonnic-----	Poorly suited-----	Too arid, small stones, rooting depth.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2230:		
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Skelon-----	Poorly suited-----	Too arid, droughty.
2233:		
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Skelon-----	Poorly suited-----	Too arid, droughty.
Bluepoint-----	Poorly suited-----	Too arid.
2250:		
Tokoper-----	Poorly suited-----	Too arid, droughty, small stones.
Upspring-----	Poorly suited-----	Too arid, droughty, small stones.
Rock Outcrop-----	Not rated-----	
2251:		
Tokoper-----	Poorly suited-----	Too arid, droughty, small stones.
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Pintwater-----	Poorly suited-----	Too arid, droughty, small stones.
2252:		
Tokoper-----	Poorly suited-----	Too arid, droughty, small stones.
Blacktop-----	Poorly suited-----	Too arid, droughty, small stones.
2253:		
Tokoper-----	Poorly suited-----	Too arid, droughty, small stones.
Ardivey-----	Poorly suited-----	Too arid, small stones.
2254:		
Tokoper-----	Poorly suited-----	Too arid, droughty, small stones.
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Espint-----	Poorly suited-----	Droughty, rooting depth.
2260:		
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
2261:		
Longjim-----	Poorly suited-----	Too arid, droughty.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Dedas-----	Poorly suited-----	Too arid, droughty, small stones.
2263:		
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
2266:		
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
2267:		
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
Skelon-----	Poorly suited-----	Too arid, droughty, small stones.
2268:		
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
Arizo-----	Poorly suited-----	Too arid, droughty, too sandy.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2269:		
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Strozi-----	Poorly suited-----	Too arid, rooting depth, excess salt.
2270:		
Bluepoint-----	Poorly suited-----	Too arid.
2271:		
Kawich-----	Poorly suited-----	Too arid, droughty, too sandy.
Corbilt-----	Poorly suited-----	Too arid.
Wanomie-----	Poorly suited-----	Too arid, excess salt, excess sodium.
2280:		
Shorim-----	Poorly suited-----	Too arid, droughty.
Zalda-----	Poorly suited-----	Too arid, droughty.
Upspring-----	Poorly suited-----	Too arid, droughty, small stones.
2281:		
Shorim-----	Poorly suited-----	Too arid, droughty.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
2282:		
Dedas-----	Poorly suited-----	Too arid, droughty, small stones.
Orwash-----	Poorly suited-----	Too arid, droughty, too sandy.
2290:		
Gabbvally-----	Poorly suited-----	Droughty, small stones.
Upspring-----	Poorly suited-----	Too arid, droughty, small stones.
Rubble Land-----	Poorly suited-----	Too arid, droughty, large stones.
2291:		
Gabbvally-----	Poorly suited-----	Droughty, small stones.
Rock Outcrop-----	Not rated-----	
2301:		
Tecopa-----	Poorly suited-----	Too arid, droughty, small stones.
Haleburu-----	Poorly suited-----	Too arid, droughty, small stones.
Rock Outcrop-----	Not rated-----	
2302:		
Tecopa-----	Poorly suited-----	Too arid, droughty, small stones.
Rock Outcrop-----	Not rated-----	
Upspring-----	Poorly suited-----	Too arid, droughty, small stones.
2304:		
Tecopa-----	Poorly suited-----	Too arid, droughty, small stones.
Zibate-----	Poorly suited-----	Too arid, droughty, small stones.
Rock Outcrop-----	Not rated-----	

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2305: Tecopa-----	Poorly suited-----	Too arid, droughty, small stones.
Rock Outcrop-----	Not rated-----	
2310: Nowoy-----	Poorly suited-----	Too arid, droughty.
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
2320: Wahguyhe-----	Poorly suited-----	Droughty, small stones.
Rock Outcrop-----	Not rated-----	
Gabbvally-----	Poorly suited-----	Droughty, small stones.
2341: Naye-----	Poorly suited-----	Too arid, droughty.
2372: Zalda-----	Poorly suited-----	Too arid, droughty.
Bluepoint-----	Poorly suited-----	Too arid.
Rock Outcrop-----	Not rated-----	
2373: Zalda-----	Poorly suited-----	Too arid, droughty.
Rubble Land-----	Poorly suited-----	Too arid, droughty, large stones.
Skelon-----	Poorly suited-----	Too arid, droughty, small stones.
2381: Armpup-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Ashmed-----	Poorly suited-----	Too arid, rooting depth, excess salt.
2391: Commski-----	Poorly suited-----	Too arid, droughty, small stones.
Ashmed-----	Poorly suited-----	Too arid, small stones, rooting depth.
2392: Commski-----	Poorly suited-----	Too arid, droughty, small stones.
Ashmed-----	Poorly suited-----	Too arid, small stones, rooting depth.
2393: Commski-----	Poorly suited-----	Too arid, droughty, small stones.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
2400: Mobl-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Scottcas-----	Poorly suited-----	Too arid, small stones, excess salt.
2401: Skelon-----	Poorly suited-----	Too arid, droughty, small stones.
Bacho-----	Poorly suited-----	Too arid, droughty, small stones.
2421: Orwash-----	Poorly suited-----	Too arid, droughty, too sandy.
Wilst-----	Poorly suited-----	Too arid, droughty, small stones.
Agon-----	Poorly suited-----	Too arid, droughty, too sandy.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2422:		
Orwash-----	Poorly suited-----	Too arid, droughty, too sandy.
Louderback-----	Poorly suited-----	Too arid, droughty, excess salt.
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.
2423:		
Orwash-----	Poorly suited-----	Too arid, droughty, too sandy.
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
Wanomie-----	Poorly suited-----	Too arid, excess salt, excess sodium.
2425:		
Orwash-----	Poorly suited-----	Too arid, droughty, too sandy.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Arizo-----	Poorly suited-----	Too arid, droughty, small stones.
2431:		
Zibate-----	Poorly suited-----	Too arid, droughty, small stones.
Zyplar-----	Poorly suited-----	Too arid, droughty, rooting depth.
Dedas-----	Poorly suited-----	Too arid, droughty, small stones.
2432:		
Zibate-----	Poorly suited-----	Too arid, droughty, small stones.
2434:		
Cruzspring-----	Poorly suited-----	Too arid, small stones.
Schader-----	Poorly suited-----	Too arid, small stones.
Rock Outcrop-----	Not rated-----	
2436:		
Zibate-----	Poorly suited-----	Too arid, droughty, small stones.
Rock Outcrop-----	Not rated-----	
2437:		
Cruzspring-----	Poorly suited-----	Too arid, small stones.
Rock Outcrop-----	Not rated-----	
2441:		
Lewdlac-----	Poorly suited-----	Too arid, droughty.
Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
2451:		
Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Sanwell-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
2461:		
Nowoy-----	Poorly suited-----	Too arid, droughty.
Skelon-----	Poorly suited-----	Too arid, droughty.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2471:		
Lewdlac-----	Poorly suited-----	Too arid, droughty.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
2481:		
Bacho-----	Poorly suited-----	Too arid, droughty, small stones.
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
2482:		
Bacho-----	Poorly suited-----	Too arid, droughty, small stones.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
2491:		
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Blacktop-----	Poorly suited-----	Too arid, droughty, small stones.
Tokoper-----	Poorly suited-----	Too arid, droughty, small stones.
2492:		
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Silverbow-----	Poorly suited-----	Too arid, droughty, small stones.
Rock Outcrop-----	Not rated-----	
2493:		
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Tognoni-----	Poorly suited-----	Too arid, droughty, small stones.
Stonell-----	Poorly suited-----	Too arid, droughty, small stones.
2494:		
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Vindicator-----	Poorly suited-----	Too arid, droughty, small stones.
Stewval-----	Poorly suited-----	Droughty, small stones, depth to rock.
2495:		
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Gabbvally-----	Poorly suited-----	Droughty, small stones.
2496:		
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Pintwater-----	Poorly suited-----	Too arid, droughty, small stones.
Upspring-----	Poorly suited-----	Too arid, droughty, small stones.
2500:		
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
Greyeagle-----	Poorly suited-----	Too arid, droughty, small stones.
2501:		
Wanomie-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Corbilt-----	Poorly suited-----	Too arid.
2510:		
Fuegosta-----	Poorly suited-----	Too arid, droughty, rooting depth.
Tomel-----	Poorly suited-----	Too arid, droughty, small stones.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2511:		
Fuegosta-----	Poorly suited-----	Too arid, droughty, rooting depth.
Wardenot-----	Poorly suited-----	Too arid.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.
2520:		
Vigus-----	Poorly suited-----	Too arid, excess sodium.
Fuegosta-----	Poorly suited-----	Too arid, droughty, rooting depth.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.
2521:		
Vigus-----	Poorly suited-----	Too arid, excess sodium.
Wardenot-----	Poorly suited-----	Too arid.
Fuegosta-----	Poorly suited-----	Too arid, droughty, rooting depth.
2531:		
Laxal-----	Poorly suited-----	Too arid, droughty, small stones.
Stonell-----	Poorly suited-----	Too arid, droughty, small stones.
Unsel-----	Poorly suited-----	Too arid.
2532:		
Laxal-----	Poorly suited-----	Too arid, droughty, small stones.
Fang-----	Poorly suited-----	Too arid.
2540:		
Lidan-----	Poorly suited-----	Too arid, droughty, rooting depth.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.
2550:		
Stonewall-----	Poorly suited-----	Too arid, rooting depth, excess salt.
Izo-----	Poorly suited-----	Too arid, droughty, too sandy.
Lidan-----	Poorly suited-----	Too arid, droughty, rooting depth.
2570:		
Stargo-----	Poorly suited-----	Too arid, rooting depth.
Playas-----	Poorly suited-----	Too arid, droughty, rooting depth.
2580:		
Wardenot-----	Poorly suited-----	Too arid, droughty, too sandy.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2601:		
Cobatus-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Kawich-----	Poorly suited-----	Too arid, droughty, too sandy.
2611:		
Corbilt-----	Poorly suited-----	Too arid, small stones.
2630:		
Wechech-----	Not rated-----	
Commski-----	Poorly suited-----	Too arid, droughty, small stones.
2640:		
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Advokay-----	Poorly suited-----	Too arid, droughty, depth to rock.
Pintwater-----	Poorly suited-----	Too arid, droughty, small stones.
2641:		
Advokay-----	Poorly suited-----	Too arid, droughty, depth to rock.
Ardivay-----	Poorly suited-----	Too arid, small stones.
Leo-----	Poorly suited-----	Too arid, droughty.
2642:		
Advokay-----	Poorly suited-----	Too arid, droughty, depth to rock.
Blacktop-----	Poorly suited-----	Too arid, droughty, small stones.
2650:		
Luning-----	Poorly suited-----	Too arid, droughty, too sandy.
Wardenot-----	Poorly suited-----	Too arid.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.
2660:		
Stonell-----	Poorly suited-----	Too arid, droughty, small stones.
Wardenot-----	Poorly suited-----	Too arid, small stones.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.
2670:		
Ardivay-----	Poorly suited-----	Too arid, small stones.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.
2671:		
Ardivay-----	Poorly suited-----	Too arid, small stones.
Stonell-----	Poorly suited-----	Too arid, droughty, small stones.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.
2680:		
Espint-----	Poorly suited-----	Droughty, rooting depth.
Vindicator-----	Poorly suited-----	Too arid, droughty, small stones.
Espint-----	Poorly suited-----	Droughty, rooting depth.
2681:		
Espint-----	Poorly suited-----	Droughty, rooting depth.
Stewval-----	Poorly suited-----	Droughty, small stones, depth to rock.
Vindicator-----	Poorly suited-----	Too arid, droughty, small stones.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2682:		
Espint-----	Poorly suited-----	Droughty, rooting depth.
Gabbvally-----	Poorly suited-----	Droughty, small stones.
Stewval-----	Poorly suited-----	Droughty, small stones, depth to rock.
2690:		
Leo-----	Poorly suited-----	Too arid, droughty.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.
2701:		
Cobatus-----	Poorly suited-----	Too arid, excess salt, excess sodium.
2710:		
Papoose-----	Poorly suited-----	Too arid, too sandy, rooting depth.
Vindicator-----	Poorly suited-----	Too arid, droughty, small stones.
Espint-----	Poorly suited-----	Droughty, rooting depth.
2720:		
Unsel-----	Poorly suited-----	Too arid.
Stonell-----	Poorly suited-----	Too arid, droughty, small stones.
Veet-----	Poorly suited-----	Too arid, droughty, small stones.
2730:		
Gabbvally-----	Poorly suited-----	Droughty, small stones.
Blacktop-----	Poorly suited-----	Too arid, droughty, small stones.
Espint-----	Poorly suited-----	Too arid, droughty, rooting depth.
2731:		
Gabbvally-----	Poorly suited-----	Droughty, small stones.
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Vindicator-----	Poorly suited-----	Too arid, droughty, small stones.
2732:		
Gabbvally-----	Poorly suited-----	Droughty, small stones.
Tognoni-----	Poorly suited-----	Too arid, droughty, small stones.
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
2734:		
Gabbvally-----	Poorly suited-----	Droughty, small stones.
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
2735:		
Gabbvally-----	Poorly suited-----	Droughty, small stones.
Wahguyhe-----	Poorly suited-----	Droughty, small stones.
Rock Outcrop-----	Not rated-----	
2736:		
Gabbvally-----	Poorly suited-----	Droughty, small stones.
Brier-----	Poorly suited-----	Droughty, small stones.
Rock Outcrop-----	Not rated-----	

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2740:		
Tognoni-----	Poorly suited-----	Too arid, droughty, small stones.
Blacktop-----	Poorly suited-----	Too arid, droughty, small stones.
2741:		
Blacktop-----	Poorly suited-----	Too arid, droughty, small stones.
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Tognoni-----	Poorly suited-----	Too arid, droughty, small stones.
2750:		
Silverbow-----	Poorly suited-----	Too arid, droughty, small stones.
Wardenot-----	Poorly suited-----	Too arid, droughty, too sandy.
Izo-----	Poorly suited-----	Too arid, droughty, small stones.
2760:		
Downeyville-----	Poorly suited-----	Too arid, droughty, small stones.
Unsel-----	Poorly suited-----	Too arid.
Tokoper-----	Poorly suited-----	Too arid, droughty, small stones.
2770:		
Bullfor-----	Poorly suited-----	Too arid, droughty, too sandy.
Panor-----	Poorly suited-----	Too arid, rooting depth, excess salt.
Bluepoint-----	Poorly suited-----	Too arid.
2781:		
Haymont-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Bluepoint-----	Poorly suited-----	Too arid.
Panor-----	Poorly suited-----	Too arid, rooting depth, excess salt.
2810:		
Ashmed-----	Poorly suited-----	Too arid, rooting depth, excess salt.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Niavi-----	Poorly suited-----	Too arid, droughty, large stones.
2820:		
Strozi-----	Poorly suited-----	Too arid, rooting depth, excess salt.
Corbilt-----	Poorly suited-----	Too arid.
2840:		
Armpup-----	Poorly suited-----	Too arid, rooting depth, excess salt.
Strozi-----	Poorly suited-----	Too arid, rooting depth, excess salt.
2850:		
Scottcas-----	Poorly suited-----	Too arid, small stones, excess salt.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
2860:		
Sezna-----	Poorly suited-----	Too arid, droughty, small stones.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
2870:		
Kanackey-----	Poorly suited-----	Too arid, droughty, small stones.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2880:		
Bacho-----	Poorly suited-----	Too arid, droughty, small stones.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
Arizo-----	Poorly suited-----	Too arid, droughty, too sandy.
2890:		
Nopah-----	Poorly suited-----	Too arid, excess salt.
Woda-----	Poorly suited-----	Too arid, droughty, excess salt.
Gullied land-----	Poorly suited-----	Too arid, droughty, small stones.
2900:		
Playas-----	Poorly suited-----	Too arid, droughty, excess salt.
2901:		
Playas-----	Poorly suited-----	Too arid, droughty, rooting depth.
Corbilt-----	Poorly suited-----	Too arid.
Bluepoint-----	Poorly suited-----	Too arid.
2903:		
Playas-----	Poorly suited-----	Too arid, droughty, rooting depth.
Mobl-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Kawich-----	Poorly suited-----	Too arid, droughty, too sandy.
2910:		
Dune Land-----	Poorly suited-----	Too arid, droughty, too sandy.
2920:		
Dumps-----	Not rated-----	
2930:		
Seralin-----	Poorly suited-----	Droughty, small stones, excess salt.
Rock Outcrop-----	Not rated-----	
Sed-----	Poorly suited-----	Droughty, small stones.
2940:		
Schader-----	Poorly suited-----	Too arid, small stones.
Sed-----	Poorly suited-----	Droughty, small stones.
Cruzspring-----	Poorly suited-----	Too arid, small stones.
2950:		
Pits-----	Not rated-----	
2951:		
Pits-----	Not rated-----	
2960:		
Tomel-----	Poorly suited-----	Too arid, droughty, small stones.
Ardivay-----	Poorly suited-----	Too arid, small stones.
Wardenot-----	Poorly suited-----	Too arid, droughty, too sandy.
2961:		
Tomel-----	Poorly suited-----	Too arid, droughty, small stones.
Breko-----	Poorly suited-----	Rooting depth.
Wardenot-----	Poorly suited-----	Too arid.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
2970:		
Destazo-----	Poorly suited-----	Too arid.
Nowoy-----	Poorly suited-----	Too arid, droughty.
Gullied Land-----	Poorly suited-----	Too arid, droughty, small stones.
2971:		
Upspring-----	Poorly suited-----	Too arid, droughty, small stones.
2990:		
Lealandic-----	Poorly suited-----	Too arid, droughty, small stones.
Ashmed-----	Poorly suited-----	Too arid, rooting depth, excess salt.
3021:		
Casaga-----	Poorly suited-----	Too arid, rooting depth, excess salt.
Destazo-----	Poorly suited-----	Too arid.
Yurm-----	Poorly suited-----	Too arid, droughty, small stones.
3022:		
Casaga-----	Poorly suited-----	Too arid, excess salt, excess sodium.
Woda-----	Poorly suited-----	Too arid, droughty, excess salt.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
3052:		
Bobnbob-----	Poorly suited-----	Excess salt.
Caslo-----	Poorly suited-----	Excess salt, excess sodium.
3101:		
Bluepoint-----	Poorly suited-----	Too arid, too sandy.
Besherm-----	Poorly suited-----	Too arid, rooting depth, excess salt.
3150:		
Casaga-----	Poorly suited-----	Too arid, rooting depth, excess salt.
3230:		
Alko-----	Poorly suited-----	Too arid, droughty, excess salt.
Casaga-----	Poorly suited-----	Too arid, excess salt, excess sodium.
3252:		
Bobnbob-----	Poorly suited-----	Too arid, rooting depth, excess salt.
Cobatus-----	Poorly suited-----	Too arid, excess salt, excess sodium.
3302:		
Rumpah-----	Poorly suited-----	Too arid, excess salt, excess sodium.
3313:		
Besherm-----	Poorly suited-----	Too arid, rooting depth, excess salt.
3320:		
Haymont-----	Poorly suited-----	Too arid, excess salt, excess sodium.
3333:		
Nopah-----	Poorly suited-----	Too arid, excess salt.
4010:		
Tanazza-----	Poorly suited-----	Too arid.
Wechech-----	Poorly suited-----	Too arid, droughty, small stones.
Wodavar-----	Poorly suited-----	Too arid, droughty, small stones.

TABLE 6.--SUITABILITY FOR RANGELAND SEEDING--continued

Soil name and map symbol	Limitation rating	Restrictive features
4030:		
Wechech-----	Not rated-----	
Nopah-----	Poorly suited-----	Too arid, excess salt.
Yermo-----	Poorly suited-----	Too arid, droughty, small stones.
4060:		
Besherm-----	Poorly suited-----	Too arid, rooting depth, excess salt.
Tanazza-----	Poorly suited-----	Too arid.
4070:		
Gynelle-----	Poorly suited-----	Too arid, droughty, too sandy.
Kawich-----	Poorly suited-----	Too arid, droughty, too sandy.
Cirac-----	Poorly suited-----	Too arid, excess salt, excess sodium.
4071:		
Corbilt-----	Poorly suited-----	Too arid.
4080:		
Water-----	Not rated-----	

TABLE 7.--WOODLAND MANAGEMENT AND PRODUCTIVITY

Map symbol and soil name	Potential productivity			Trees to manage
	Common trees	Site index	Volume of wood fiber cu ft/ac	
1321:				
Boxspring-----	---	---	---	---
Seralin-----	Utah juniper----- singleleaf pinyon---	---	---	---
		35	4	
Rock Outcrop-----	---	---	---	---
2434:				
Zibate-----	---	---	---	---
Sed-----	Utah juniper----- singleleaf pinyon---	30	---	---
		30	3	
Rock Outcrop-----	---	---	---	---
2736:				
Brier-----	Utah juniper----- singleleaf pinyon---	30	---	---
		30	3	
Gabbvally-----	---	---	---	---
Rock Outcrop-----	---	---	---	---
2930:				
Seralin-----	Utah juniper----- singleleaf pinyon---	---	---	---
		35	4	
Rock Outcrop-----	---	---	---	---
Sed-----	Utah juniper----- singleleaf pinyon---	30	---	---
		30	3	
2940:				
Schader-----	---	---	---	---
Sed-----	Utah juniper----- singleleaf pinyon---	30	---	---
		30	3	
Cruzspring-----	---	---	---	---

TABLE 8a.--BUILDING SITE DEVELOPMENT

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1314: Weiser-----	70	Not limited		Not limited		Somewhat limited Slope	0.12
Wechech-----	15	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan Slope	1.00 0.12
1315: Lastchance-----	40	Very limited Depth to thick cemented pan Slope	1.00 0.01	Very limited Depth to thick cemented pan Slope	1.00 0.01	Very limited Depth to thick cemented pan Slope	1.00 1.00
Lastchance, upper elevation fans-----	30	Very limited Depth to thick cemented pan Slope	1.00 0.01	Very limited Depth to thick cemented pan Slope	1.00 0.01	Very limited Depth to thick cemented pan Slope	1.00 1.00
Commski-----	15	Not limited		Not limited		Somewhat limited Slope	0.12
1316: Lastchance-----	40	Very limited Depth to thick cemented pan Slope	1.00 0.01	Very limited Depth to thick cemented pan Slope	1.00 0.01	Very limited Depth to thick cemented pan Slope	1.00 1.00
Ferrogold-----	30	Very limited Depth to thick cemented pan Slope	1.00 0.01	Very limited Depth to thick cemented pan Slope	1.00 0.01	Very limited Depth to thick cemented pan Slope	1.00 1.00
Commski-----	15	Not limited		Not limited		Somewhat limited Slope	0.12
1317: Commski-----	70	Not limited		Not limited		Somewhat limited Slope	0.12
Lastchance-----	15	Very limited Depth to thick cemented pan	1.00	Very limited Depth to thick cemented pan	1.00	Very limited Depth to thick cemented pan Slope	1.00 0.12

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1320: Boxspring-----	50	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Zeheme-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
1321: Boxspring-----	40	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Seralin-----	30	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
1340: Longjim-----	70	Somewhat limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope	1.00 1.00
Niavi-----	15	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones Slope	1.00 0.01 0.01
1871: Irongold-----	45	Not limited		Not limited		Somewhat limited Slope	0.12
Irongold-----	25	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Weiser-----	15	Not limited		Not limited		Somewhat limited Slope	0.12
2002: Rock Outcrop-----	45	Not rated		Not rated		Not rated	

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Upspring-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Rubble Land-----	15	Not rated		Not rated		Not rated	
2004: Rock Outcrop-----	55	Not rated		Not rated		Not rated	
Zyplar-----	30	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Slope Depth to hard bedrock Shrink-swell	1.00 1.00 0.50
2005: Rock Outcrop-----	50	Not rated		Not rated		Not rated	
St. Thomas-----	20	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.58
St. Thomas-----	15	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.56	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.56	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.56
2010: Longjim-----	90	Somewhat limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope	1.00 1.00
2011: Sanwell-----	45	Not limited		Not limited		Not limited	
Sanwell-----	40	Not limited		Not limited		Not limited	
2012: Zalda-----	45	Very limited Depth to hard bedrock Depth to thin cemented pan	1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan	1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 0.12

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Greyeagle-----	30	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Slope Depth to thin cemented pan	1.00 1.00
Upspring-----	15	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 1.00
2013: Longjim-----	45	Somewhat limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope	1.00 1.00
Yurm-----	40	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
2020: Weiser-----	70	Not limited		Not limited		Not limited	
Canoto-----	25	Not limited		Not limited		Not limited	
2021: Weiser-----	70	Not limited		Not limited		Not limited	
Nickel-----	25	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
2023: Commski-----	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Commski-----	30	Not limited		Not limited		Somewhat limited Slope	0.12
Sezna-----	20	Somewhat limited Depth to thin cemented pan Shrink-swell Content of large stones	1.00 0.50 0.18	Very limited Depth to thin cemented pan Shrink-swell Content of large stones	1.00 0.50 0.18	Somewhat limited Depth to thin cemented pan Shrink-swell Content of large stones	1.00 0.50 0.18
2030: Corbilt-----	85	Not limited		Not limited		Not limited	
2031: Corbilt-----	60	Not limited		Not limited		Somewhat limited Slope	0.48
Skelon-----	35	Not limited		Somewhat limited Depth to thin cemented pan	0.65	Somewhat limited Slope	0.48

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2040:							
Yurm-----	70	Not limited		Not limited		Somewhat limited Slope	0.12
Canoto-----	15	Not limited		Not limited		Not limited	
Yurm, moist-----	10	Not limited		Not limited		Somewhat limited Slope	0.12
2050:							
Canoto-----	50	Not limited		Not limited		Not limited	
Naye-----	35	Not limited		Somewhat limited Depth to thin cemented pan	0.84	Not limited	
2051:							
Yermo-----	35	Not limited		Not limited		Not limited	
Woda-----	30	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
Nowoy-----	20	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell Slope	1.00 0.50 0.12
2052:							
Canoto-----	85	Not limited		Not limited		Not limited	
2053:							
Yermo-----	60	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Greyeagle-----	20	Somewhat limited Depth to thin cemented pan Slope	1.00 0.63	Very limited Depth to thin cemented pan Slope	1.00 0.63	Very limited Depth to thin cemented pan Slope	1.00 1.00
Arizo-----	15	Very limited Flooding Slope Content of large stones	1.00 0.16 0.05	Very limited Flooding Slope Content of large stones	1.00 0.16 0.05	Very limited Flooding Slope Content of large stones	1.00 1.00 0.05
2054:							
Yermo, hot-----	40	Not limited		Not limited		Not limited	
Yermo-----	30	Not limited		Not limited		Not limited	
Arizo-----	15	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2055:							
Canoto-----	60	Not limited		Not limited		Somewhat limited Slope	0.12

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Canoto, MOIST-----	25	Not limited		Not limited		Not limited	
2057: Yermo-----	50	Not limited		Not limited		Not limited	
Commski-----	40	Not limited		Not limited		Not limited	
2058: Canoto-----	50	Not limited		Not limited		Not limited	
Nickel-----	40	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope	1.00
2060: Purob-----	60	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan Slope	1.00 0.12
Irongold-----	25	Not limited		Not limited		Somewhat limited Slope	0.12
2061: Vace-----	95	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Slope	1.00 1.00
2062: Purob-----	75	Very limited Depth to thin cemented pan Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to thin cemented pan Slope Shrink-swell	1.00 1.00 0.50	Very limited Slope Depth to thin cemented pan Shrink-swell	1.00 1.00 0.50
Niavi-----	10	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones Slope	1.00 0.01 0.01
2064: Longjim, summer precip.-----	55	Somewhat limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope	1.00 1.00
Purob-----	20	Somewhat limited Depth to thin cemented pan Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to thin cemented pan Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to thin cemented pan Slope Shrink-swell	1.00 1.00 0.50

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Niavi-----	10	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones Slope	1.00 0.01 0.01
2070: Shamock-----	90	Not limited		Somewhat limited Depth to thin cemented pan	0.03	Not limited	
2071: Shamock-----	45	Not limited		Somewhat limited Depth to thin cemented pan	0.03	Not limited	
Skelon-----	40	Not limited		Somewhat limited Depth to thin cemented pan	0.65	Not limited	
2080: St. Thomas-----	35	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.58
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Commski-----	20	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
2081: St. Thomas-----	45	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.58	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.58	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.58
Tecopa-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2090: Breko-----	55	Somewhat limited Shrink-swell	0.50	Not limited		Somewhat limited Shrink-swell	0.50
Veet-----	35	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2110: Pahrump-----	90	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
2121: Commski-----	60	Not limited		Not limited		Not limited	
Arizo-----	30	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2131: Upspring-----	55	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Shorim-----	20	Very limited Slope	1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope	1.00
		Depth to hard bedrock	0.92	Depth to thin cemented pan	0.99	Depth to hard bedrock	0.92
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2140: Jonnic-----	75	Somewhat limited Shrink-swell Content of large stones	0.50 0.03	Somewhat limited Shrink-swell Content of large stones Depth to thin cemented pan	0.50 0.03 0.01	Somewhat limited Shrink-swell Slope Content of large stones	0.50 0.48 0.03
Niavi-----	10	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones Slope	1.00 0.01 0.01
2151: Arizo-----	40	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Bluepoint-----	35	Not limited		Not limited		Not limited	
Dune Land-----	15	Not rated		Not rated		Not rated	
2152: Arizo-----	85	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2153: Arizo-----	35	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Corbilt-----	25	Not limited		Not limited		Not limited	
Commski-----	25	Not limited		Not limited		Not limited	
2161: Casaga-----	55	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50
Nowoy-----	30	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50
2162: Casaga-----	40	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
Panor-----	25	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
Yermo-----	20	Not limited		Not limited		Not limited	
2171: Sanwell-----	60	Not limited		Not limited		Not limited	
Skelon-----	30	Not limited		Somewhat limited Depth to thin cemented pan	0.65	Not limited	
2172: Sanwell-----	60	Not limited		Not limited		Somewhat limited Slope	0.12
Yermo-----	35	Not limited		Not limited		Somewhat limited Slope	0.12
2181: Skelon-----	30	Not limited		Somewhat limited Depth to thin cemented pan	0.65	Not limited	
Yermo-----	30	Not limited		Not limited		Not limited	
Pinez-----	25	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
2184: Skelon-----	60	Not limited		Somewhat limited Depth to thin cemented pan	0.65	Not limited	
Bullfor-----	25	Not limited		Somewhat limited Depth to thin cemented pan	0.90	Not limited	

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2185: Skelon-----	50	Somewhat limited Slope	0.16	Somewhat limited Depth to thin cemented pan Slope	0.65 0.16	Very limited Slope	1.00
Yermo-----	30	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
Ashmed-----	15	Not limited		Not limited		Somewhat limited Slope	0.48
2186: Yermo-----	35	Not limited		Not limited		Not limited	
Skelon-----	35	Not limited		Somewhat limited Depth to thin cemented pan	0.65	Not limited	
Pinez-----	15	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
2191: Pinez-----	40	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
Lealandic-----	35	Very limited Shrink-swell	1.00	Very limited Shrink-swell Depth to thin cemented pan	1.00 0.95	Very limited Shrink-swell	1.00
Arizo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2201: Corbilt-----	65	Not limited		Not limited		Not limited	
Arizo-----	30	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2202: Corbilt-----	50	Not limited		Not limited		Somewhat limited Slope	0.12
Migern-----	25	Not limited		Not limited		Somewhat limited Slope	0.12
Arizo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2204: Corbilt-----	40	Not limited		Not limited		Not limited	
Wodavar-----	25	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan Slope	1.00 0.12

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Sanwell-----	25	Not limited		Not limited		Somewhat limited Slope	0.12
2212: Yermo-----	70	Not limited		Not limited		Not limited	
Bullfor-----	20	Not limited		Somewhat limited Depth to thin cemented pan	0.90	Not limited	
2214: Yermo-----	65	Not limited		Not limited		Not limited	
Arizo-----	30	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2215: Yermo-----	60	Not limited		Not limited		Not limited	
Greyeagle-----	25	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
2216: Yermo-----	65	Not limited		Not limited		Not limited	
Arizo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2218: Sanwell-----	50	Not limited		Not limited		Not limited	
Commski-----	45	Not limited		Not limited		Not limited	
2220: Canoto-----	65	Not limited		Not limited		Not limited	
Arizo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2221: Sanwell-----	60	Not limited		Not limited		Not limited	
Greyeagle-----	30	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
2222: Niavi-----	55	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones Slope	1.00 0.01 0.01

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Jonnic-----	35	Somewhat limited Shrink-swell Content of large stones	0.50 0.03	Somewhat limited Shrink-swell Content of large stones Depth to thin cemented pan	0.50 0.03 0.01	Somewhat limited Shrink-swell Slope Content of large stones	0.50 0.12 0.03
2230: Yermo-----	60	Not limited		Not limited		Not limited	
Skelon-----	25	Not limited		Somewhat limited Depth to thin cemented pan	0.65	Not limited	
2233: Yermo-----	35	Not limited		Not limited		Somewhat limited Slope	0.48
Skelon-----	25	Not limited		Somewhat limited Depth to thin cemented pan	0.65	Somewhat limited Slope	0.48
Bluepoint-----	25	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
2250: Tokoper-----	40	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 1.00 0.11
Upspring-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2251: Tokoper-----	35	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 1.00 0.11
Downeyville-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Pintwater-----	20	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68
2252: Tokoper-----	55	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 1.00 0.11
Blacktop-----	30	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68
2253: Tokoper-----	60	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.16 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.16 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 1.00 0.11
Ardivey-----	25	Somewhat limited Content of large stones	0.02	Somewhat limited Content of large stones	0.02	Somewhat limited Slope Content of large stones	0.12 0.02
2254: Tokoper-----	35	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 1.00 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 1.00 0.11	Very limited Slope Depth to hard bedrock Depth to thin cemented pan Content of large stones	1.00 1.00 1.00 0.11
Downeyville-----	30	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Espint-----	25	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 1.00	Very limited Shrink-swell Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Slope Depth to soft bedrock Shrink-swell	1.00 1.00 1.00
2260: Greyeagle-----	85	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan Slope	1.00 0.12
2261: Longjim-----	40	Somewhat limited Depth to thin cemented pan Slope	1.00 0.63	Very limited Depth to thin cemented pan Slope	1.00 0.63	Very limited Depth to thin cemented pan Slope	1.00 1.00
Yermo-----	25	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope	1.00
Dedas-----	20	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 0.16	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 0.16	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00
2263: Greyeagle-----	65	Somewhat limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope	1.00 1.00
Sanwell-----	15	Not limited		Not limited		Somewhat limited Slope	0.12
Yermo-----	15	Not limited		Not limited		Somewhat limited Slope	0.12
2266: Greyeagle-----	95	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Slope Depth to thin cemented pan	1.00 1.00
2267: Greyeagle-----	75	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
Skelon-----	20	Not limited		Somewhat limited Depth to thin cemented pan	0.65	Not limited	

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2268: Greyeagle-----	70	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan Slope	1.00 0.48
Arizo-----	25	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding Slope	1.00 0.12
2269: Greyeagle-----	45	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
Yermo-----	30	Not limited		Not limited		Not limited	
Strozi-----	20	Not limited		Somewhat limited Depth to thin cemented pan	0.29	Not limited	
2270: Bluepoint-----	85	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
2271: Kawich-----	40	Not limited		Not limited		Not limited	
Corbilt-----	25	Not limited		Not limited		Not limited	
Wanomie-----	20	Not limited		Somewhat limited Depth to thin cemented pan	0.46	Not limited	
2280: Shorim-----	60	Somewhat limited Depth to hard bedrock Slope	0.90 0.04	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 0.99 0.04	Very limited Slope Depth to hard bedrock	1.00 0.90
Zalda-----	15	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Slope Depth to hard bedrock Depth to thin cemented pan	1.00 1.00 1.00
Upspring-----	15	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2281: Shorim-----	80	Somewhat limited Depth to hard bedrock Slope	0.90 0.63	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 0.99 0.63	Very limited Slope Depth to hard bedrock	1.00 0.90
Yermo-----	15	Not limited		Not limited		Somewhat limited Slope	0.12
2282: Dedas-----	70	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00
Orwash-----	20	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
2290: Gabbvally-----	40	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Upspring-----	35	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rubble Land-----	15	Not rated		Not rated		Not rated	
2291: Gabbvally-----	70	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2301: Tecopa-----	50	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Haleburu-----	20	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2302: Tecopa-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Upspring-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
2304: Tecopa-----	50	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Zibate-----	25	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Slope Depth to hard bedrock Shrink-swell	1.00 1.00 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2305: Tecopa-----	70	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2310: Nowoy-----	45	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell Slope	1.00 0.50 0.12

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Commski-----	40	Not limited		Not limited		Somewhat limited Slope	0.12
2312: Commski-----	55	Not limited		Not limited		Not limited	
Tanazza-----	30	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell Slope	0.50 0.12
2320: Wahguyhe-----	40	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Gabbvally-----	20	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
2341: Naye-----	85	Not limited		Somewhat limited Depth to thin cemented pan	0.84	Somewhat limited Slope	0.48
2372: Zalda-----	35	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Slope Depth to hard bedrock Depth to thin cemented pan	1.00 1.00 1.00
Bluepoint-----	35	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope	1.00
Rock Outcrop-----	20	Not rated		Not rated		Not rated	
2373: Zalda-----	40	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00
Rubble Land-----	25	Not rated		Not rated		Not rated	

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Skelon-----	20	Somewhat limited Slope	0.63	Somewhat limited Depth to thin cemented pan Slope	0.65 0.63	Very limited Slope	1.00
2381: Armpup-----	55	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell Slope	0.50 0.48
Ashmed-----	30	Not limited		Not limited		Somewhat limited Slope	0.48
2391: Commski-----	65	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Ashmed-----	25	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
2392: Commski-----	65	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Ashmed-----	25	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
2393: Commski-----	70	Not limited		Not limited		Not limited	
Yermo-----	25	Not limited		Not limited		Not limited	
2400: Mobl-----	65	Not limited		Not limited		Not limited	
Scottcas-----	20	Not limited		Not limited		Not limited	
2401: Skelon-----	55	Somewhat limited Slope	0.16	Somewhat limited Depth to thin cemented pan Slope	0.65 0.16	Very limited Slope	1.00
Bacho-----	30	Somewhat limited Depth to thin cemented pan Shrink-swell	1.00 0.50	Very limited Depth to thin cemented pan Shrink-swell	1.00 0.50	Somewhat limited Depth to thin cemented pan Shrink-swell Slope	1.00 0.50 0.48
2421: Orwash-----	50	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Wilst-----	25	Somewhat limited Depth to hard bedrock	0.20	Very limited Depth to hard bedrock	1.00	Somewhat limited Slope Depth to hard bedrock	0.48 0.20

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Agon-----	20	Somewhat limited Depth to hard bedrock	0.20	Very limited Depth to hard bedrock Depth to thin cemented pan	1.00 0.29	Somewhat limited Depth to hard bedrock	0.20
2422: Orwash-----	45	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Louderback-----	25	Very limited Flooding	1.00	Very limited Flooding Depth to saturated zone	1.00 0.61	Very limited Flooding	1.00
Arizo-----	15	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2423: Orwash-----	40	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
Greyeagle-----	30	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
Wanomie-----	20	Not limited		Somewhat limited Depth to thin cemented pan	0.46	Not limited	
2425: Orwash-----	45	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Yermo-----	25	Not limited		Not limited		Not limited	
Arizo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2431: Zibate-----	55	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Slope Depth to hard bedrock Shrink-swell	1.00 1.00 0.50
Zyplar-----	15	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Dedas-----	15	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00
2432: Zibate-----	85	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50
2434: Cruzspring-----	40	Very limited Depth to hard bedrock Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Slope Depth to hard bedrock Depth to soft bedrock	1.00 1.00 1.00
Schader-----	30	Very limited Slope Depth to hard bedrock	1.00 0.64	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.64
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2436: Zibate-----	70	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Slope Depth to hard bedrock Shrink-swell	1.00 1.00 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2437: Cruzspring-----	70	Very limited Depth to hard bedrock Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Slope Depth to hard bedrock Depth to soft bedrock	1.00 1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2441: Lewdlac-----	50	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan Slope	1.00 0.12
Sanwell-----	35	Not limited		Not limited		Somewhat limited Slope	0.12
2451: Sanwell-----	40	Not limited		Not limited		Not limited	
Sanwell-----	25	Not limited		Not limited		Not limited	
Yermo-----	20	Not limited		Not limited		Not limited	
2461: Nowoy-----	60	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell Slope	1.00 0.50 0.12
Skelon-----	25	Not limited		Somewhat limited Depth to thin cemented pan	0.65	Not limited	
2471: Lewdlac-----	70	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
Yermo-----	15	Not limited		Not limited		Not limited	
2481: Bacho-----	70	Somewhat limited Depth to thin cemented pan Shrink-swell	1.00 0.50	Very limited Depth to thin cemented pan Shrink-swell	1.00 0.50	Somewhat limited Depth to thin cemented pan Shrink-swell Slope	1.00 0.50 0.48
Greyeagle-----	20	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Slope	1.00 1.00
2482: Bacho-----	55	Somewhat limited Depth to thin cemented pan Shrink-swell Slope	1.00 0.50 0.16	Very limited Depth to thin cemented pan Shrink-swell Slope	1.00 0.50 0.16	Very limited Depth to thin cemented pan Slope Shrink-swell	1.00 1.00 0.50
Yermo-----	30	Not limited		Not limited		Somewhat limited Slope	0.48

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2491: Downeyville-----	35	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Blacktop-----	30	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68
Tokoper-----	20	Very limited Slope Depth to hard bedrock Depth to thin cemented pan Content of large stones	1.00 1.00 1.00 0.11	Very limited Slope Depth to hard bedrock Depth to thin cemented pan Content of large stones	1.00 1.00 1.00 0.11	Very limited Slope Depth to hard bedrock Depth to thin cemented pan Content of large stones	1.00 1.00 1.00 0.11
2492: Downeyville-----	40	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Silverbow-----	35	Very limited Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.70	Very limited Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.70	Very limited Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.70
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2493: Downeyville-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Tognoni-----	30	Very limited Depth to hard bedrock Slope Content of large stones Shrink-swell	1.00 1.00 0.88 0.50	Very limited Depth to hard bedrock Slope Content of large stones Shrink-swell	1.00 1.00 0.88 0.50	Very limited Slope Depth to hard bedrock Content of large stones Shrink-swell	1.00 1.00 0.88 0.50
Stonell-----	25	Not limited		Not limited		Somewhat limited Slope	0.12

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2494: Downeyville-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Vindicator-----	25	Somewhat limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 0.50
Stewval-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
2495: Downeyville-----	55	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Gabbvally-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
2496: Downeyville-----	40	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Pintwater-----	30	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.24	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.24	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.24
Upspring-----	15	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
2500: Commski-----	70	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Greyeagle-----	20	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Slope Depth to thin cemented pan	1.00 1.00
2501: Wanomie-----	60	Not limited		Somewhat limited Depth to thin cemented pan	0.46	Not limited	
Corbilt-----	25	Not limited		Not limited		Not limited	
2510: Fuegosta-----	40	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to thin cemented pan	1.00 1.00	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00
Tomel-----	25	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
Izo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2511: Fuegosta-----	45	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to thin cemented pan	1.00 1.00	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00
Wardenot-----	30	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Izo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2520: Vigus-----	40	Not limited		Not limited		Not limited	
Fuegosta-----	25	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to thin cemented pan	1.00 1.00	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00
Izo-----	25	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2521: Vigus-----	35	Not limited		Not limited		Not limited	
Wardenot-----	30	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Fuegosta-----	25	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to thin cemented pan	1.00 1.00	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00
2531: Laxal-----	30	Not limited		Not limited		Somewhat limited Slope	0.12
Stonell-----	30	Not limited		Not limited		Somewhat limited Slope	0.12
Unsel-----	25	Not limited		Not limited		Somewhat limited Slope	0.12
2532: Laxal-----	50	Not limited		Not limited		Not limited	
Fang-----	35	Not limited		Not limited		Not limited	
2540: Lidan-----	65	Somewhat limited Slope Shrink-swell	0.63 0.50	Somewhat limited Slope Shrink-swell Depth to thin cemented pan	0.63 0.50 0.46	Very limited Slope Shrink-swell	1.00 0.50
Izo-----	20	Very limited Flooding Slope	1.00 0.16	Very limited Flooding Slope	1.00 0.16	Very limited Flooding Slope	1.00 1.00
2550: Stonewall-----	60	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Slope	1.00
Izo-----	15	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding Slope	1.00 0.48
Lidan-----	15	Somewhat limited Slope Shrink-swell	0.63 0.50	Somewhat limited Slope Shrink-swell Depth to thin cemented pan	0.63 0.50 0.46	Very limited Slope Shrink-swell	1.00 0.50
2570: Stargo-----	70	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Playas-----	20	Not rated		Not rated		Not rated	
2580: Wardenot-----	50	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding Slope	1.00 0.12

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Izo-----	35	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2601: Cobatus-----	65	Somewhat limited Shrink-swell	0.50	Somewhat limited Depth to saturated zone Shrink-swell	0.90 0.50	Somewhat limited Shrink-swell	0.50
Kawich-----	25	Not limited		Not limited		Not limited	
2611: Corbilt-----	85	Not limited		Not limited		Somewhat limited Slope	0.01
2630: Wechech-----	55	Somewhat limited Depth to thin cemented pan Slope	1.00 0.04	Very limited Depth to thin cemented pan Slope	1.00 0.04	Very limited Depth to thin cemented pan Slope	1.00 1.00
Commski-----	40	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Slope	1.00
2640: Downeyville-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Advokay-----	35	Somewhat limited Depth to soft bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 0.50
Pintwater-----	15	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.24	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.24	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.24
2641: Advokay-----	35	Somewhat limited Depth to soft bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 0.50
Ardivey-----	30	Somewhat limited Content of large stones	0.02	Somewhat limited Content of large stones	0.02	Somewhat limited Slope Content of large stones	0.12 0.02

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Leo-----	20	Not limited		Not limited		Somewhat limited Slope	0.12
2642: Advokay-----	65	Somewhat limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.16	Very limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.16	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 0.50
Blacktop-----	20	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68
2650: Luning-----	40	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Wardenot-----	30	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
Izo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2660: Stonell-----	35	Not limited		Not limited		Somewhat limited Slope	0.12
Wardenot-----	30	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding Slope	1.00 0.12
Izo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2670: Ardivey-----	65	Somewhat limited Content of large stones	0.02	Somewhat limited Content of large stones	0.02	Somewhat limited Slope Content of large stones	0.12 0.02
Izo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2671: Ardivey-----	45	Somewhat limited Content of large stones	0.02	Somewhat limited Content of large stones	0.02	Somewhat limited Content of large stones	0.02
Stonell-----	20	Not limited		Not limited		Not limited	
Izo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2680: Espint-----	35	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 1.00	Very limited Shrink-swell Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Slope Depth to soft bedrock Shrink-swell	1.00 1.00 1.00
Vindicator-----	30	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Slope Depth to soft bedrock Shrink-swell	1.00 1.00 0.50
Espint-----	20	Very limited Depth to soft bedrock Shrink-swell Slope	1.00 1.00 0.04	Very limited Shrink-swell Depth to soft bedrock Slope	1.00 1.00 0.04	Very limited Depth to soft bedrock Shrink-swell Slope	1.00 1.00 1.00
2681: Espint-----	40	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 1.00	Very limited Shrink-swell Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Slope Depth to soft bedrock Shrink-swell	1.00 1.00 1.00
Stewval-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Vindicator-----	15	Very limited Slope Depth to soft bedrock Shrink-swell	1.00 1.00 0.50	Very limited Slope Depth to soft bedrock Shrink-swell	1.00 1.00 0.50	Very limited Slope Depth to soft bedrock Shrink-swell	1.00 1.00 0.50
2682: Espint-----	30	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 1.00	Very limited Shrink-swell Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Slope Depth to soft bedrock Shrink-swell	1.00 1.00 1.00
Gabbvally-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Stewval-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
2690: Leo-----	55	Not limited		Not limited		Not limited	
Izo-----	35	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2701: Cobatus-----	90	Somewhat limited Shrink-swell	0.50	Somewhat limited Depth to saturated zone Shrink-swell	0.90 0.50	Somewhat limited Shrink-swell	0.50
2710: Papoose-----	35	Not limited		Not limited		Somewhat limited Slope	0.12
Vindicator-----	35	Somewhat limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 0.50
Espint-----	15	Very limited Depth to soft bedrock Shrink-swell	1.00 1.00	Very limited Shrink-swell Depth to soft bedrock	1.00 1.00	Very limited Depth to soft bedrock Shrink-swell	1.00 1.00
2720: Unsel-----	40	Not limited		Not limited		Somewhat limited Slope	0.12
Stonell-----	30	Not limited		Not limited		Somewhat limited Slope	0.12
Veet-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding Slope	1.00 0.12
2730: Gabbvally-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Blacktop-----	30	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Espint-----	20	Very limited Depth to soft bedrock Shrink-swell Slope	1.00 1.00 1.00	Very limited Shrink-swell Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Depth to soft bedrock Shrink-swell Slope	1.00 1.00 1.00
2731: Gabbvally-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Downeyville-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Vindicator-----	25	Somewhat limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 0.50
2732: Gabbvally-----	40	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Tognoni-----	25	Very limited Depth to hard bedrock Slope Shrink-swell Content of large stones	1.00 1.00 0.50 0.31	Very limited Depth to hard bedrock Slope Shrink-swell Content of large stones	1.00 1.00 0.50 0.31	Very limited Slope Depth to hard bedrock Shrink-swell Content of large stones	1.00 1.00 0.50 0.31
Downeyville-----	20	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
2734: Gabbvally-----	70	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Downeyville-----	20	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2735: Gabbvally-----	45	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Wahguyhe-----	25	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2736: Gabbvally-----	35	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Brier-----	35	Very limited Slope Depth to hard bedrock Content of large stones Shrink-swell	1.00 1.00 0.65 0.50	Very limited Slope Depth to hard bedrock Content of large stones Shrink-swell	1.00 1.00 0.65 0.50	Very limited Slope Depth to hard bedrock Content of large stones Shrink-swell	1.00 1.00 0.65 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2740: Tognoni-----	65	Very limited Depth to hard bedrock Slope Shrink-swell Content of large stones	1.00 1.00 0.50 0.31	Very limited Depth to hard bedrock Slope Shrink-swell Content of large stones	1.00 1.00 0.50 0.31	Very limited Depth to hard bedrock Slope Shrink-swell Content of large stones	1.00 1.00 0.50 0.31
Blacktop-----	20	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
2741: Blacktop-----	50	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68	Very limited Slope Depth to hard bedrock Content of large stones	1.00 1.00 0.68

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Downeyville-----	20	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Tognoni-----	20	Very limited Depth to hard bedrock Slope Content of large stones Shrink-swell	1.00 1.00 0.88 0.50	Very limited Depth to hard bedrock Slope Content of large stones Shrink-swell	1.00 1.00 0.88 0.50	Very limited Slope Depth to hard bedrock Content of large stones Shrink-swell	1.00 1.00 0.88 0.50
2750: Silverbow-----	50	Somewhat limited Depth to thin cemented pan Content of large stones	1.00 0.70	Very limited Depth to thin cemented pan Content of large stones	1.00 0.70	Somewhat limited Depth to thin cemented pan Content of large stones Slope	1.00 0.70 0.12
Wardenot-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding Slope	1.00 0.12
Izo-----	15	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2760: Downeyville-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Unsel-----	30	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
Tokoper-----	20	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.16 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.16 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 1.00 0.11
2770: Bullfor-----	50	Not limited		Somewhat limited Depth to thin cemented pan	0.90	Not limited	
Panor-----	30	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Bluepoint-----	15	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
2781:							
Haymont-----	50	Not limited		Not limited		Not limited	
Bluepoint-----	20	Not limited		Not limited		Not limited	
Panor-----	15	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
2810:							
Ashmed, moist-----	50	Not limited		Not limited		Not limited	
Yermo-----	20	Not limited		Not limited		Not limited	
Niavi-----	15	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
		Content of large stones	0.01	Content of large stones	0.01	Content of large stones	0.01
						Slope	0.01
2820:							
Strozi-----	60	Not limited		Somewhat limited Depth to thin cemented pan	0.29	Not limited	
Corbilt-----	30	Not limited		Not limited		Not limited	
2840:							
Armpup-----	60	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
Strozi-----	35	Not limited		Somewhat limited Depth to thin cemented pan	0.29	Not limited	
2850:							
Scottcas-----	50	Not limited		Not limited		Somewhat limited Slope	0.48
Yermo-----	35	Not limited		Not limited		Somewhat limited Slope	0.48
2860:							
Sezna-----	50	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
		Shrink-swell	0.50	Shrink-swell	0.50	Shrink-swell	0.50
		Content of large stones	0.18	Content of large stones	0.18	Content of large stones	0.18
						Slope	0.12
Yermo-----	35	Not limited		Not limited		Not limited	

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2870: Kanackey-----	85	Very limited Depth to hard bedrock Slope Content of large stones Shrink-swell	1.00 1.00 0.94 0.50	Very limited Depth to hard bedrock Slope Content of large stones Shrink-swell	1.00 1.00 0.94 0.50	Very limited Slope Depth to hard bedrock Content of large stones Shrink-swell	1.00 1.00 0.94 0.50
2880: Bacho-----	45	Somewhat limited Depth to thin cemented pan Shrink-swell	1.00 0.50	Very limited Depth to thin cemented pan Shrink-swell	1.00 0.50	Somewhat limited Depth to thin cemented pan Shrink-swell Slope	1.00 0.50 0.12
Yermo-----	25	Not limited		Not limited		Not limited	
Arizo-----	15	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
2890: Nopah-----	35	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell Slope	0.50 0.48
Woda-----	30	Somewhat limited Depth to thin cemented pan Slope	1.00 0.04	Very limited Depth to thin cemented pan Slope	1.00 0.04	Very limited Depth to thin cemented pan Slope	1.00 1.00
Gullied Land-----	20	Not rated		Not rated		Not rated	
2900: Playas-----	100	Not rated		Not rated		Not rated	
2901: Playas-----	40	Not rated		Not rated		Not rated	
Corbilt-----	30	Not limited		Not limited		Not limited	
Bluepoint-----	20	Not limited		Not limited		Not limited	
2903: Playas-----	45	Not rated		Not rated		Not rated	
Mobl-----	30	Not limited		Not limited		Not limited	
Kawich-----	15	Not limited		Not limited		Not limited	

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2910: Dune Land-----	100	Not rated		Not rated		Not rated	
2920: Dumps-----	100	Not rated		Not rated		Not rated	
2930: Seralin-----	55	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
Sed-----	15	Very limited Slope Depth to hard bedrock Shrink-swell	1.00 0.90 0.50	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Slope Depth to hard bedrock Shrink-swell	1.00 0.90 0.50
2940: Schader-----	40	Very limited Slope Depth to hard bedrock	1.00 0.64	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Slope Depth to hard bedrock	1.00 0.64
Sed-----	30	Very limited Slope Depth to hard bedrock Shrink-swell	1.00 0.90 0.50	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Slope Depth to hard bedrock Shrink-swell	1.00 0.90 0.50
Cruzspring-----	15	Very limited Depth to hard bedrock Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to soft bedrock Slope	1.00 1.00 1.00	Very limited Slope Depth to hard bedrock Depth to soft bedrock	1.00 1.00 1.00
2950: Pits-----	100	Not rated		Not rated		Not rated	
2951: Pits-----	100	Not rated		Not rated		Not rated	
2960: Tomel-----	35	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ardivey-----	30	Somewhat limited Content of large stones	0.02	Somewhat limited Content of large stones	0.02	Somewhat limited Slope Content of large stones	0.12 0.02
Wardenot-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding Slope	1.00 0.12
2961: Tomel-----	55	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan Slope	1.00 0.12
Breko-----	15	Somewhat limited Shrink-swell	0.50	Not limited		Somewhat limited Shrink-swell Slope	0.50 0.12
Wardenot-----	15	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding Slope	1.00 0.12
2970: Destazo-----	40	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
Nowoy-----	30	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50
Gullied Land-----	20	Not rated		Not rated		Not rated	
2971: Upspring-----	85	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 1.00
2990: Lealandic-----	60	Very limited Shrink-swell	1.00	Very limited Shrink-swell Depth to thin cemented pan	1.00 0.95	Very limited Shrink-swell	1.00
Ashmed-----	30	Not limited		Not limited		Not limited	
3021: Casaga-----	45	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
Destazo-----	25	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell Slope	0.50 0.12

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Yurm-----	20	Not limited		Not limited		Not limited	
3022: Casaga-----	40	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50
Woda-----	35	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
Yermo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
3052: Bobnbob-----	65	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell Depth to saturated zone	1.00 0.50 0.35	Very limited Flooding Shrink-swell	1.00 0.50
Caslo-----	20	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.98 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.98 0.50
3101: Bluepoint-----	45	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Slope	1.00
Besherm-----	40	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00
3120: Nowoy-----	45	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell Slope	1.00 0.50 0.12
Tanazza-----	25	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
Yurm-----	20	Not limited		Not limited		Not limited	
3150: Casaga-----	85	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
3230: Alko-----	60	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
Casaga-----	30	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Shrink-swell	1.00 0.50

TABLE 8a.--BUILDING SITE DEVELOPMENT--CONTINUED

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3252: Bobnbob-----	70	Very limited Flooding Shrink-swell	1.00 0.50	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.82 0.50	Very limited Flooding Shrink-swell	1.00 0.50
Cobatus-----	15	Somewhat limited Shrink-swell	0.50	Somewhat limited Depth to saturated zone Shrink-swell	0.90 0.50	Somewhat limited Shrink-swell	0.50
3302: Rumpah-----	90	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00
3313: Besherm-----	85	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00
3320: Haymont-----	85	Not limited		Not limited		Not limited	
3333: Nopah-----	85	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
4010: Tanazza-----	35	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell Slope	0.50 0.12
Wechech-----	35	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan Slope	1.00 0.12
Wodavar-----	15	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan Slope	1.00 0.12
4030: Wechech-----	45	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Somewhat limited Depth to thin cemented pan	1.00
Nopah-----	20	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50
Yermo-----	20	Not limited		Not limited		Not limited	
4060: Besherm-----	70	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00	Very limited Shrink-swell	1.00
Tanazza-----	15	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50	Somewhat limited Shrink-swell	0.50

TABLE 8a.--BUILDING SITE DEVELOPMENT

Map symbol and soil name	Pct. of map unit	Dwellings without basements		Dwellings with basements		Small commercial buildings	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
4070: Gynelle-----	35	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding Content of large stones	1.00 0.01
Kawich-----	25	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Slope	1.00
Cirac-----	25	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Flooding	1.00
4071: Corbilt-----	85	Not limited		Not limited		Not limited	
4080: Water-----	100	Not rated		Not rated		Not rated	

TABLE 8b.--BUILDING SITE DEVELOPMENT

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1314: Weiser-----	70	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Carbonate content Droughty Content of large stones	1.00 1.00 0.50 0.11
Wechech-----	15	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 0.10	Very limited Depth to cemented pan Gravel content Droughty Content of large stones	1.00 1.00 1.00 0.03
1315: Lastchance-----	40	Very limited Depth to thick cemented pan Frost action Slope	1.00 0.50 0.01	Very limited Depth to thick cemented pan Cutbanks cave Slope	1.00 1.00 0.01	Very limited Gravel content Droughty Depth to cemented pan Content of large stones Slope	1.00 1.00 1.00 1.00 0.32 0.01
Lastchance, upper elevation fans-----	30	Very limited Depth to thick cemented pan Frost action Slope	1.00 0.50 0.01	Very limited Depth to thick cemented pan Cutbanks cave Slope	1.00 1.00 0.01	Very limited Gravel content Droughty Depth to cemented pan Content of large stones Slope	1.00 1.00 1.00 1.00 0.32 0.01
Commski-----	15	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content Content of large stones	1.00 1.00 0.03

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1316: Lastchance-----	40	Very limited Depth to thick cemented pan Frost action Slope	1.00 0.50 0.01	Very limited Depth to thick cemented pan Cutbanks cave Slope	1.00 1.00 0.01	Very limited Gravel content Droughty Depth to cemented pan Content of large stones Slope	1.00 1.00 1.00 0.32 0.01
Ferrogold-----	30	Very limited Depth to thick cemented pan Frost action Slope	1.00 0.50 0.01	Very limited Depth to thick cemented pan Cutbanks cave Slope	1.00 0.10 0.01	Very limited Depth to cemented pan Gravel content Droughty Content of large stones Slope	1.00 1.00 1.00 0.11 0.01
Commski-----	15	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content Content of large stones	1.00 1.00 0.03
1317: Commski-----	70	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content Content of large stones	1.00 1.00 0.03
Lastchance-----	15	Very limited Depth to thick cemented pan Frost action	1.00 0.50	Very limited Depth to thick cemented pan Cutbanks cave	1.00 1.00	Very limited Gravel content Droughty Depth to cemented pan Content of large stones	1.00 1.00 1.00 0.32
1320: Boxspring-----	50	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.84

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Zeheme-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Content of large stones Droughty Slope	1.00 1.00 1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
1321: Boxspring-----	40	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Droughty Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.84
Seralin-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Droughty Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.84
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
1340: Longjim-----	70	Somewhat limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope Cutbanks cave	1.00 0.16 0.10	Very limited Depth to cemented pan Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 0.16 0.03
Niavi-----	15	Very limited Flooding Content of large stones	1.00 0.01	Very limited Cutbanks cave Flooding Content of large stones	1.00 0.60 0.01	Very limited Content of large stones Droughty Flooding Gravel content	1.00 1.00 0.60 0.57

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1871: Irongold-----	45	Not limited		Very limited Cutbanks cave	1.00	Very limited Depth to cemented pan Gravel content Droughty Carbonate content Content of large stones	1.00 1.00 1.00 1.00 0.03
Irongold-----	25	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63	Very limited Depth to cemented pan Gravel content Droughty Carbonate content Slope	1.00 1.00 1.00 1.00 0.63
Weiser-----	15	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.98 0.32
2002: Rock Outcrop-----	45	Not rated		Not rated		Not rated	
Upspring-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.01
Rubble Land-----	15	Not rated		Not rated		Not rated	
2004: Rock Outcrop-----	55	Not rated		Not rated		Not rated	
Zyplar-----	30	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Content of large stones Gravel content	1.00 1.00 1.00 0.20 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2005: Rock Outcrop-----	50	Not rated		Not rated		Not rated	
St. Thomas-----	20	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.58 0.10	Very limited Depth to bedrock Droughty Slope Content of large stones Gravel content	1.00 1.00 1.00 1.00 1.00 0.01
St. Thomas-----	15	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.56	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.56 0.10	Very limited Depth to bedrock Droughty Slope Content of large stones Gravel content	1.00 1.00 1.00 1.00 1.00 0.01
2010: Longjim-----	90	Somewhat limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope Cutbanks cave	1.00 0.16 0.10	Very limited Depth to cemented pan Droughty Gravel content Slope	1.00 1.00 0.41 0.16
2011: Sanwell-----	45	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.18 0.15
Sanwell-----	40	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.18 0.15
2012: Zalda-----	45	Very limited Depth to hard bedrock Depth to thin cemented pan	1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.36 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Greyeagle-----	30	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Cutbanks cave Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
Upspring-----	15	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 0.63 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 0.63 0.01
2013: Longjim-----	45	Somewhat limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope Cutbanks cave	1.00 0.16 0.10	Very limited Depth to cemented pan Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 0.16 0.03
Yurm-----	40	Somewhat limited Slope	0.16	Somewhat limited Slope Cutbanks cave	0.16 0.10	Very limited Depth to cemented pan Droughty Gravel content Salinity Slope	1.00 1.00 1.00 0.50 0.16
2020: Weiser-----	70	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Carbonate content Droughty Content of large stones	1.00 1.00 0.39 0.03
Canoto-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.01
2021: Weiser-----	70	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Carbonate content Droughty Content of large stones	1.00 1.00 0.39 0.03

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Nickel-----	25	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16	Somewhat limited Droughty Gravel content Slope	0.96 0.41 0.16
2023: Commski-----	35	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.03
Commski-----	30	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content Content of large stones	1.00 1.00 0.03
Sezna-----	20	Somewhat limited Depth to thin cemented pan Shrink-swell Content of large stones	1.00 0.50 0.18	Very limited Depth to thin cemented pan Content of large stones Cutbanks cave	1.00 0.18 0.10	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 0.33 0.01
2030: Corbilt-----	85	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Gravel content	0.32
2031: Corbilt-----	60	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Gravel content	0.32
Skelon-----	35	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.65	Very limited Droughty Depth to cemented pan Gravel content	1.00 0.64 0.41
2040: Yurm-----	70	Not limited		Somewhat limited Cutbanks cave	0.10	Very limited Depth to cemented pan Droughty Gravel content Salinity	1.00 1.00 1.00 0.50
Canoto-----	15	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Yurm, moist-----	10	Not limited		Somewhat limited Cutbanks cave	0.10	Very limited Depth to cemented pan	1.00
						Droughty	1.00
						Gravel content	1.00
						Salinity	0.50
2050: Canoto-----	50	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content	1.00
						Droughty	0.69
						Content of large stones	0.01
Naye-----	35	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty	1.00
				Depth to thin cemented pan	0.84	Gravel content	1.00
						Depth to cemented pan	0.84
						Content of large stones	0.03
2051: Yermo-----	35	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content	1.00
						Droughty	0.69
						Content of large stones	0.20
Woda-----	30	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan	1.00	Very limited Depth to cemented pan	1.00
				Cutbanks cave	0.10	Carbonate content	1.00
						Droughty	0.86
						Salinity	0.50
Nowoy-----	20	Somewhat limited Shrink-swell Flooding	0.50 0.40	Very limited Cutbanks cave	1.00	Very limited Carbonate content	1.00
						Gravel content	0.32
2052: Canoto-----	85	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content	1.00
						Droughty	0.69
						Content of large stones	0.01
2053: Yermo-----	60	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Slope	1.00
						Gravel content	1.00
						Droughty	0.69
						Content of large stones	0.20

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Greyeagle-----	20	Somewhat limited Depth to thin cemented pan Slope	1.00 0.63	Very limited Depth to thin cemented pan Cutbanks cave Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.63 0.01
Arizo-----	15	Somewhat limited Flooding Slope Content of large stones	0.40 0.16 0.05	Very limited Cutbanks cave Slope Content of large stones	1.00 0.16 0.05	Very limited Content of large stones Droughty Slope	1.00 1.00 1.00 0.16
2054: Yermo, hot-----	40	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Yermo-----	30	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Arizo-----	15	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty	1.00 1.00
2055: Canoto-----	60	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.01
Canoto, MOIST-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.01
2057: Yermo-----	50	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Commski-----	40	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content Content of large stones	1.00 1.00 0.03

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2058: Canoto-----	50	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.01
Nickel-----	40	Somewhat limited Slope	0.04	Very limited Cutbanks cave Slope	1.00 0.04	Somewhat limited Droughty Gravel content Slope	0.88 0.41 0.04
2060: Purob-----	60	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 0.10	Very limited Depth to cemented pan Gravel content Droughty Carbonate content Content of large stones	1.00 1.00 1.00 1.00 0.03
Irongold-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Depth to cemented pan Gravel content Droughty Carbonate content Content of large stones	1.00 1.00 1.00 1.00 0.03
2061: Vace-----	95	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Cutbanks cave Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Droughty Slope Sodium content Gravel content	1.00 1.00 1.00 1.00 0.14
2062: Purob-----	75	Very limited Depth to thin cemented pan Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to thin cemented pan Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to cemented pan Slope Carbonate content Droughty Gravel content	1.00 1.00 1.00 0.92 0.50
Niavi-----	10	Very limited Flooding Content of large stones	1.00 0.01	Very limited Cutbanks cave Flooding Content of large stones	1.00 0.60 0.01	Very limited Content of large stones Droughty Flooding Gravel content	1.00 1.00 0.60 0.57

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2064: Longjim, summer precip.-----	55	Somewhat limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Slope Cutbanks cave	1.00 0.16 0.10	Very limited Depth to cemented pan Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 0.16 0.03
Purob-----	20	Somewhat limited Depth to thin cemented pan Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to thin cemented pan Cutbanks cave Slope	1.00 0.10 0.04	Very limited Depth to cemented pan Carbonate content Droughty Gravel content Slope	1.00 1.00 0.92 0.50 0.04
Niavi-----	10	Very limited Flooding Content of large stones	1.00 0.01	Very limited Cutbanks cave Flooding Content of large stones	1.00 0.60 0.01	Very limited Content of large stones Droughty Flooding Gravel content	1.00 1.00 1.00 0.60 0.57
2070: Shamock-----	90	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.03	Somewhat limited Gravel content Depth to cemented pan Droughty	0.50 0.03 0.03
2071: Shamock-----	45	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.03	Somewhat limited Gravel content Depth to cemented pan Droughty	0.50 0.03 0.03
Skelon-----	40	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.65	Very limited Droughty Gravel content Depth to cemented pan Content of large stones	1.00 1.00 0.64 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2080: St. Thomas-----	35	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.58 0.10	Very limited Depth to bedrock Droughty Content of large stones Slope Gravel content	1.00 1.00 1.00 1.00 1.00 0.01
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Commski-----	20	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63	Very limited Droughty Gravel content Slope Content of large stones	1.00 1.00 0.63 0.03
2081: St. Thomas-----	45	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.58 0.10	Very limited Depth to bedrock Slope Droughty Content of large stones Gravel content	1.00 1.00 1.00 1.00 1.00 0.01
Tecopa-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.08
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2090: Breko-----	55	Somewhat limited Shrink-swell Frost action	0.50 0.50	Very limited Cutbanks cave	1.00	Somewhat limited Gravel content Droughty	0.25 0.03
Veet-----	35	Somewhat limited Frost action Flooding	0.50 0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.98 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2110: Pahrump-----	90	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16	Somewhat limited Slope	0.16
2121: Commski-----	60	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content Content of large stones	1.00 1.00 0.03
Arizo-----	30	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Gravel content Droughty Flooding	1.00 1.00 0.60
2131: Upspring-----	55	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.01
Shorim-----	20	Very limited Slope Depth to hard bedrock	1.00 0.92	Very limited Depth to hard bedrock Cutbanks cave Slope Depth to thin cemented pan	1.00 1.00 1.00 1.00 0.99	Very limited Droughty Slope Gravel content Depth to cemented pan Depth to bedrock	1.00 1.00 1.00 0.99 0.92
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2140: Jonnic-----	75	Somewhat limited Shrink-swell Content of large stones	0.50 0.03	Very limited Cutbanks cave Too clayey Content of large stones Depth to thin cemented pan	1.00 0.12 0.03 0.01	Somewhat limited Gravel content Droughty Depth to cemented pan	0.41 0.39 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Niavi-----	10	Very limited Flooding	1.00	Very limited Cutbanks cave	1.00	Very limited Content of large stones	1.00
		Content of large stones	0.01	Flooding	0.60	Droughty	1.00
				Content of large stones	0.01	Flooding	0.60
						Gravel content	0.57
2151: Arizo-----	40	Very limited Flooding	1.00	Very limited Cutbanks cave	1.00	Very limited Gravel content	1.00
				Flooding	0.60	Droughty	1.00
						Flooding	0.60
Bluepoint-----	35	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty	0.62
Dune Land-----	15	Not rated		Not rated		Not rated	
2152: Arizo-----	85	Very limited Flooding	1.00	Very limited Cutbanks cave	1.00	Very limited Gravel content	1.00
				Flooding	0.60	Droughty	1.00
						Flooding	0.60
2153: Arizo-----	35	Very limited Flooding	1.00	Very limited Cutbanks cave	1.00	Very limited Gravel content	1.00
				Flooding	0.60	Droughty	1.00
						Flooding	0.60
Corbilt-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content	1.00
						Content of large stones	0.01
Commski-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty	1.00
						Gravel content	1.00
						Content of large stones	0.03
2161: Casaga-----	55	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Salinity	1.00
		Flooding	0.40			Sodium content	1.00
						Gravel content	0.50
Nowoy-----	30	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Carbonate content	1.00
		Flooding	0.40			Gravel content	0.32

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2162:							
Casaga-----	40	Somewhat limited Shrink-swell Frost action	0.50 0.50	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content Gravel content	1.00 1.00 0.41
Panor-----	25	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content	1.00 1.00
Yermo-----	20	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
2171:							
Sanwell-----	60	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.18 0.15
Skelon-----	30	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.65	Very limited Droughty Gravel content Depth to cemented pan Content of large stones	1.00 1.00 0.64 0.01
2172:							
Sanwell-----	60	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.18 0.15
Yermo-----	35	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
2181:							
Skelon-----	30	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.65	Very limited Droughty Depth to cemented pan Gravel content	1.00 0.64 0.41
Yermo-----	30	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Pinez-----	25	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty	1.00 0.91
2184: Skelon-----	60	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.65	Very limited Droughty Depth to cemented pan Gravel content	1.00 0.64 0.41
Bullfor-----	25	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.90	Very limited Droughty Depth to cemented pan Gravel content	1.00 0.90 0.18
2185: Skelon-----	50	Somewhat limited Slope	0.16	Very limited Cutbanks cave Depth to thin cemented pan Slope	1.00 0.65 0.16	Very limited Droughty Gravel content Depth to cemented pan Slope Content of large stones	1.00 1.00 0.64 0.16 0.01
Yermo-----	30	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16	Very limited Gravel content Droughty Content of large stones Slope	1.00 0.69 0.20 0.16
Ashmed-----	15	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Salinity Gravel content	1.00 0.50 0.18
2186: Yermo-----	35	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Skelon-----	35	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.65	Very limited Droughty Depth to cemented pan Gravel content	1.00 0.64 0.41
Pinez-----	15	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty	1.00 0.91

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2191: Pinez-----	40	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty	1.00 0.91
Lealandic-----	35	Very limited Shrink-swell	1.00	Very limited Cutbanks cave Depth to thin cemented pan Too clayey	1.00 0.95 0.03	Very limited Gravel content Droughty Depth to cemented pan Content of large stones	1.00 1.00 0.95 0.01
Arizo-----	20	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty	1.00 1.00
2201: Corbilt-----	65	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Content of large stones	1.00 0.01
Arizo-----	30	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty	1.00 1.00
2202: Corbilt-----	50	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Gravel content	0.32
Migern-----	25	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.20 0.18
Arizo-----	20	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty	1.00 1.00
2204: Corbilt-----	40	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Gravel content	0.32
Wodavar-----	25	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Gravel content Droughty Carbonate content	1.00 1.00 1.00 1.00
Sanwell-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.18 0.15

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2212: Yermo-----	70	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Bullfor-----	20	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.90	Very limited Droughty Depth to cemented pan Gravel content	1.00 0.90 0.18
2214: Yermo-----	65	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Arizo-----	30	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Gravel content Droughty Flooding	1.00 1.00 0.60
2215: Yermo-----	60	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Greyeagle-----	25	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.01
2216: Yermo-----	65	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Arizo-----	20	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty	1.00 1.00
2218: Sanwell-----	50	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.18 0.15

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Commski-----	45	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content Content of large stones	1.00 1.00 0.03
2220: Canoto-----	65	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.15 0.03
Arizo-----	20	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Gravel content Droughty Flooding	1.00 1.00 0.60
2221: Sanwell-----	60	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.18 0.15
Greyeagle-----	30	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.01
2222: Niavi-----	55	Very limited Flooding Content of large stones	1.00 0.01	Very limited Cutbanks cave Flooding Content of large stones	1.00 0.60 0.01	Very limited Content of large stones Droughty Flooding Gravel content	1.00 1.00 0.60 0.57
Jonnic-----	35	Somewhat limited Shrink-swell Content of large stones	0.50 0.03	Very limited Cutbanks cave Too clayey Content of large stones Depth to thin cemented pan	1.00 0.12 0.03 0.01	Somewhat limited Gravel content Droughty Depth to cemented pan	0.41 0.39 0.01
2230: Yermo-----	60	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Skelon-----	25	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.65	Very limited Droughty Depth to cemented pan Gravel content	1.00 0.64 0.41
2233: Yermo-----	35	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Skelon-----	25	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.65	Very limited Droughty Depth to cemented pan Gravel content	1.00 0.64 0.41
Bluepoint-----	25	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope	1.00 0.63	Somewhat limited Slope Droughty	0.63 0.62
2250: Tokoper-----	40	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones Cutbanks cave	1.00 1.00 0.63 0.11 0.10	Very limited Depth to bedrock Depth to cemented pan Content of large stones Droughty Slope	1.00 1.00 1.00 1.00 1.00 0.63
Upspring-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.01
Rock Outcrop-----	15	Not rated		Not rated		Not rated	

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2251: Tokoper-----	35	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones Cutbanks cave	1.00 1.00 0.63 0.11 0.10	Very limited Depth to bedrock Depth to cemented pan Content of large stones Droughty Slope	1.00 1.00 1.00 1.00 0.63
Downeyville-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20
Pintwater-----	20	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.68 0.10	Very limited Depth to bedrock Droughty Slope Content of large stones Gravel content	1.00 1.00 1.00 0.68 0.54
2252: Tokoper-----	55	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones Cutbanks cave	1.00 1.00 0.63 0.11 0.10	Very limited Depth to bedrock Depth to cemented pan Content of large stones Droughty Slope	1.00 1.00 1.00 1.00 0.63
Blacktop-----	30	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.68 0.10	Very limited Depth to bedrock Droughty Slope Content of large stones Gravel content	1.00 1.00 1.00 1.00 0.20

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2253: Tokoper-----	60	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.16 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones Cutbanks cave	1.00 1.00 0.16 0.11 0.10	Very limited Depth to bedrock Depth to cemented pan Content of large stones Droughty Slope	1.00 1.00 1.00 1.00 1.00 0.16
Ardivey-----	25	Somewhat limited Content of large stones	0.02	Very limited Cutbanks cave Content of large stones	1.00 0.02	Very limited Gravel content Droughty Content of large stones	1.00 0.89 0.03
2254: Tokoper-----	35	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 1.00 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones Cutbanks cave	1.00 1.00 1.00 0.11 0.10	Very limited Depth to bedrock Depth to cemented pan Slope Content of large stones Droughty	1.00 1.00 1.00 1.00 1.00 1.00
Downeyville-----	30	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 0.63 0.10	Very limited Depth to bedrock Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.63 0.20
Espint-----	25	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 1.00	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.03
2260: Greyeagle-----	85	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2261: Longjim-----	40	Somewhat limited Depth to thin cemented pan Slope	1.00 0.63	Very limited Depth to thin cemented pan Slope Cutbanks cave	1.00 0.63 0.10	Very limited Depth to cemented pan Droughty Slope Gravel content	1.00 1.00 0.63 0.41
Yermo-----	25	Somewhat limited Slope	0.04	Very limited Cutbanks cave Slope	1.00 0.04	Very limited Gravel content Droughty Content of large stones Slope	1.00 0.69 0.20 0.04
Dedas-----	20	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 0.16	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Cutbanks cave	1.00 1.00 0.16 0.10	Very limited Depth to bedrock Depth to cemented pan Droughty Gravel content Slope	1.00 1.00 1.00 1.00 0.16
2263: Greyeagle-----	65	Somewhat limited Depth to thin cemented pan Slope	1.00 0.16	Very limited Depth to thin cemented pan Cutbanks cave Slope	1.00 1.00 0.16	Very limited Depth to cemented pan Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.16 0.01
Sanwell-----	15	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.18 0.15
Yermo-----	15	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
2266: Greyeagle-----	95	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Cutbanks cave Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2267: Greyeagle-----	75	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.01
Skelon-----	20	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.65	Very limited Droughty Gravel content Depth to cemented pan Content of large stones	1.00 1.00 0.64 0.01
2268: Greyeagle-----	70	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.01
Arizo-----	25	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Gravel content Droughty Flooding	1.00 1.00 0.60
2269: Greyeagle-----	45	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.01
Yermo-----	30	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Strozi-----	20	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.29	Somewhat limited Salinity Gravel content Droughty Depth to cemented pan	0.50 0.50 0.30 0.29

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2270: Bluepoint-----	85	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Slope Droughty	1.00 0.62
2271: Kawich-----	40	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Salinity	0.92 0.50
Corbilt-----	25	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Gravel content	0.32
Wanomie-----	20	Not limited		Somewhat limited Depth to thin cemented pan Cutbanks cave	0.46 0.10	Very limited Salinity Sodium content Depth to cemented pan Droughty	1.00 1.00 0.46 0.08
2280: Shorim-----	60	Somewhat limited Depth to hard bedrock Slope	0.90 0.04	Very limited Depth to hard bedrock Cutbanks cave Depth to thin cemented pan Slope	1.00 1.00 0.99 0.04	Very limited Droughty Gravel content Depth to cemented pan Depth to bedrock Slope	1.00 1.00 0.99 0.90 0.04
Zalda-----	15	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Depth to cemented pan Droughty Slope Gravel content	1.00 1.00 1.00 1.00 0.36
Upspring-----	15	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.01
2281: Shorim-----	80	Somewhat limited Depth to hard bedrock Slope	0.90 0.63	Very limited Depth to hard bedrock Cutbanks cave Depth to thin cemented pan Slope	1.00 1.00 0.99 0.63	Very limited Droughty Gravel content Depth to cemented pan Depth to bedrock Slope	1.00 1.00 0.99 0.90 0.63

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Yermo-----	15	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
2282: Dedas-----	70	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Depth to cemented pan Droughty Gravel content Slope	1.00 1.00 1.00 1.00 1.00
Orwash-----	20	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16	Very limited Droughty Gravel content Slope	0.99 0.41 0.16
2290: Gabbvally-----	40	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
Upspring-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Gravel content Droughty Content of large stones	1.00 1.00 1.00 1.00 0.01
Rubble Land-----	15	Not rated		Not rated		Not rated	
2291: Gabbvally-----	70	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2301: Tecopa-----	50	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.08
Haleburu-----	20	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.99
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2302: Tecopa-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.08
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Upspring-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2304: Tecopa-----	50	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.08
Zibate-----	25	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Slope Droughty Content of large stones	1.00 1.00 1.00 0.94 0.11
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2305: Tecopa-----	70	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.08
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2310: Nowoy-----	45	Somewhat limited Shrink-swell Flooding	0.50 0.40	Very limited Cutbanks cave	1.00	Very limited Carbonate content Gravel content	1.00 0.32
Commski-----	40	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content Content of large stones	1.00 1.00 0.03
2312: Commski-----	55	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content Content of large stones	1.00 1.00 0.03
Tanazza-----	30	Somewhat limited Shrink-swell	0.50	Somewhat limited Cutbanks cave	0.10	Very limited Carbonate content	1.00

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2320: Wahguyhe-----	40	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content	1.00 1.00 1.00 1.00
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Gabbvally-----	20	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
2341: Naye-----	85	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.84	Very limited Droughty Depth to cemented pan Gravel content Content of large stones	1.00 0.84 0.22 0.01
2372: Zalda-----	35	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Depth to cemented pan Droughty Slope Gravel content	1.00 1.00 1.00 1.00 0.36
Bluepoint-----	35	Somewhat limited Slope	0.04	Very limited Cutbanks cave Slope	1.00 0.04	Somewhat limited Droughty Slope	0.62 0.04
Rock Outcrop-----	20	Not rated		Not rated		Not rated	
2373: Zalda-----	40	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Depth to cemented pan Droughty Slope Gravel content	1.00 1.00 1.00 1.00 0.36

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Rubble Land-----	25	Not rated		Not rated		Not rated	
Skelon-----	20	Somewhat limited Slope	0.63	Very limited Cutbanks cave Depth to thin cemented pan Slope	1.00 0.65 0.63	Very limited Droughty Gravel content Depth to cemented pan Slope Content of large stones	1.00 1.00 0.64 0.63 0.01
2381: Armpup-----	55	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content Gravel content	1.00 1.00 1.00
Ashmed-----	30	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Salinity Gravel content	1.00 0.50 0.18
2391: Commski-----	65	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.03
Ashmed-----	25	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16	Very limited Gravel content Sodium content Salinity Slope Droughty	1.00 1.00 0.50 0.16 0.05
2392: Commski-----	65	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.03
Ashmed-----	25	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16	Very limited Gravel content Sodium content Salinity Slope Droughty	1.00 1.00 0.50 0.16 0.05

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2393: Commski-----	70	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content Content of large stones	1.00 1.00 0.03
Yermo-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
2400: Mobl-----	65	Not limited		Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content Gravel content Droughty Content of large stones	1.00 1.00 1.00 0.25 0.03
Scottcas-----	20	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.99 0.03
2401: Skelon-----	55	Somewhat limited Slope	0.16	Very limited Cutbanks cave Depth to thin cemented pan Slope	1.00 0.65 0.16	Very limited Droughty Gravel content Depth to cemented pan Slope Content of large stones	1.00 1.00 0.64 0.16 0.01
Bacho-----	30	Somewhat limited Depth to thin cemented pan Shrink-swell	1.00 0.50	Very limited Depth to thin cemented pan Cutbanks cave Too clayey	1.00 0.10 0.03	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.11
2421: Orwash-----	50	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content	0.99 0.41
Wilst-----	25	Somewhat limited Depth to hard bedrock	0.20	Very limited Depth to hard bedrock Cutbanks cave	1.00 1.00	Very limited Gravel content Droughty Depth to bedrock	1.00 1.00 0.20

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Agon-----	20	Somewhat limited Depth to hard bedrock	0.20	Very limited Depth to hard bedrock Cutbanks cave Depth to thin cemented pan	1.00 1.00 0.29	Very limited Gravel content Droughty Depth to cemented pan Depth to bedrock	1.00 0.99 0.29 0.20
2422: Orwash-----	45	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content	0.99 0.41
Louderback-----	25	Somewhat limited Frost action Flooding	0.50 0.40	Very limited Cutbanks cave Depth to saturated zone	1.00 0.61	Very limited Salinity Sodium content Droughty	1.00 1.00 0.91
Arizo-----	15	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Gravel content Droughty Flooding	1.00 1.00 0.60
2423: Orwash-----	40	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16	Very limited Droughty Gravel content Slope	0.99 0.41 0.16
Greyeagle-----	30	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.01
Wanomie-----	20	Not limited		Somewhat limited Depth to thin cemented pan Cutbanks cave	0.46 0.10	Very limited Salinity Sodium content Gravel content Depth to cemented pan Droughty	1.00 1.00 1.00 0.46 0.14
2425: Orwash-----	45	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content	0.99 0.41
Yermo-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Arizo-----	20	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Gravel content Droughty Flooding	1.00 1.00 0.60
2431: Zibate-----	55	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Gravel content Droughty Content of large stones	1.00 1.00 1.00 0.92 0.03
Zyplar-----	15	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 0.63 0.10	Very limited Depth to bedrock Droughty Slope Content of large stones Gravel content	1.00 1.00 0.63 0.20 0.01
Dedas-----	15	Very limited Depth to hard bedrock Depth to thin cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Depth to cemented pan Droughty Gravel content Slope	1.00 1.00 1.00 1.00 1.00
2432: Zibate-----	85	Very limited Depth to hard bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 0.63 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 0.92 0.63 0.03
2434: Cruzspring-----	40	Very limited Depth to hard bedrock Depth to soft bedrock Slope Frost action	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 1.00 0.11

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

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TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2451: Sanwell-----	40	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.18 0.15
Sanwell-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.18 0.15
Yermo-----	20	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
2461: Nowoy-----	60	Somewhat limited Shrink-swell Flooding	0.50 0.40	Very limited Cutbanks cave	1.00	Very limited Carbonate content Gravel content	1.00 0.32
Skelon-----	25	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.65	Very limited Droughty Depth to cemented pan Gravel content	1.00 0.64 0.41
2471: Lewdlac-----	70	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Droughty Gravel content	1.00 0.93 0.50
Yermo-----	15	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
2481: Bacho-----	70	Somewhat limited Depth to thin cemented pan Shrink-swell	1.00 0.50	Very limited Depth to thin cemented pan Cutbanks cave Too clayey	1.00 0.10 0.03	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.11
Greyeagle-----	20	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Cutbanks cave Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2482: Bacho-----	55	Somewhat limited Depth to thin cemented pan Shrink-swell Slope	1.00 0.50 0.16	Very limited Depth to thin cemented pan Slope Cutbanks cave Too clayey	1.00 0.16 0.10 0.03	Very limited Depth to cemented pan Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.16 0.11
Yermo-----	30	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
2491: Downeyville-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Droughty Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20
Blacktop-----	30	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.68 0.10	Very limited Depth to bedrock Slope Droughty Content of large stones Gravel content	1.00 1.00 1.00 1.00 1.00 0.20
Tokoper-----	20	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 1.00 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones Cutbanks cave	1.00 1.00 1.00 0.11 0.10	Very limited Depth to bedrock Depth to cemented pan Slope Content of large stones Droughty	1.00 1.00 1.00 1.00 1.00 1.00
2492: Downeyville-----	40	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Silverbow-----	35	Very limited Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.70	Very limited Depth to thin cemented pan Slope Content of large stones Cutbanks cave	1.00 1.00 0.70 0.10	Very limited Depth to cemented pan Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 0.38 0.08
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2493: Downeyville-----	30	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20
Tognoni-----	30	Very limited Depth to hard bedrock Slope Content of large stones Shrink-swell	1.00 1.00 0.88 0.50	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.88 0.10	Very limited Depth to bedrock Droughty Slope Content of large stones Gravel content	1.00 1.00 1.00 1.00 0.26
Stonell-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Salinity Droughty Gravel content	1.00 0.97 0.41
2494: Downeyville-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20
Vindicator-----	25	Somewhat limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to soft bedrock Cutbanks cave Slope	1.00 0.10 0.04	Very limited Depth to bedrock Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.04 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Stewval-----	25	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
2495: Downeyville-----	55	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20
Gabbvally-----	30	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
2496: Downeyville-----	40	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Droughty Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20
Pintwater-----	30	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.24	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.24 0.10	Very limited Depth to bedrock Slope Droughty Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.03
Upspring-----	15	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Gravel content Droughty Content of large stones	1.00 1.00 1.00 1.00 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2500: Commski-----	70	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00	Very limited Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.03
Greyeagle-----	20	Very limited Depth to thin cemented pan Slope	1.00 1.00	Very limited Depth to thin cemented pan Cutbanks cave Slope	1.00 1.00 1.00	Very limited Depth to cemented pan Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
2501: Wanomie-----	60	Not limited		Somewhat limited Depth to thin cemented pan Cutbanks cave	0.46 0.10	Very limited Salinity Sodium content Depth to cemented pan Droughty	1.00 1.00 0.46 0.08
Corbilt-----	25	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Gravel content	0.32
2510: Fuegosta-----	40	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00	Very limited Depth to thin cemented pan Cutbanks cave Too clayey	1.00 0.10 0.03	Very limited Depth to cemented pan Droughty Salinity Gravel content	1.00 1.00 0.50 0.14
Tomel-----	25	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Gravel content Droughty	1.00 1.00 1.00
Izo-----	20	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Droughty Gravel content Flooding Too sandy Content of large stones	1.00 1.00 0.60 0.50 0.11
2511: Fuegosta-----	45	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00	Very limited Depth to thin cemented pan Cutbanks cave Too clayey	1.00 0.10 0.03	Very limited Depth to cemented pan Droughty Salinity Gravel content	1.00 1.00 0.50 0.14

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Wardenot-----	30	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.79 0.50
Izo-----	20	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Droughty Gravel content Flooding Too sandy Content of large stones	1.00 1.00 0.60 0.50 0.11
2520: Vigus-----	40	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.14 0.06
Fuegosta-----	25	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00	Very limited Depth to thin cemented pan Cutbanks cave Too clayey	1.00 0.10 0.03	Very limited Depth to cemented pan Droughty Salinity Gravel content	1.00 1.00 0.50 0.14
Izo-----	25	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Droughty Gravel content Flooding Too sandy Content of large stones	1.00 1.00 0.60 0.50 0.11
2521: Vigus-----	35	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Gravel content Droughty	1.00 0.14 0.06
Wardenot-----	30	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.79 0.50
Fuegosta-----	25	Very limited Depth to thin cemented pan Shrink-swell	1.00 1.00	Very limited Depth to thin cemented pan Cutbanks cave Too clayey	1.00 0.10 0.03	Very limited Depth to cemented pan Droughty Salinity Gravel content	1.00 1.00 0.50 0.14
2531: Laxal-----	30	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content Content of large stones	0.92 0.29 0.03

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Stonell-----	30	Not limited		Very limited Cutbanks cave	1.00	Very limited Salinity Droughty Gravel content	1.00 0.97 0.41
Unsel-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Droughty Gravel content	1.00 0.42 0.32
2532: Laxal-----	50	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content Content of large stones	0.92 0.29 0.03
Fang-----	35	Not limited		Very limited Cutbanks cave	1.00	Not limited	
2540: Lidan-----	65	Somewhat limited Slope Shrink-swell	0.63 0.50	Very limited Cutbanks cave Slope Depth to thin cemented pan Too clayey	1.00 0.63 0.46 0.28	Very limited Droughty Slope Depth to cemented pan Gravel content	1.00 0.63 0.46 0.25
Izo-----	20	Very limited Flooding Slope	1.00 0.16	Very limited Cutbanks cave Flooding Slope	1.00 0.60 0.16	Very limited Droughty Gravel content Flooding Too sandy Slope	1.00 1.00 0.60 0.50 0.16
2550: Stonewall-----	60	Somewhat limited Slope	0.63	Very limited Cutbanks cave Slope Too clayey	1.00 0.63 0.28	Somewhat limited Droughty Slope Salinity Gravel content	0.76 0.63 0.50 0.32
Izo-----	15	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Droughty Gravel content Flooding Too sandy Content of large stones	1.00 1.00 0.60 0.50 0.11
Lidan-----	15	Somewhat limited Slope Shrink-swell	0.63 0.50	Very limited Cutbanks cave Slope Depth to thin cemented pan Too clayey	1.00 0.63 0.46 0.28	Very limited Droughty Slope Depth to cemented pan Gravel content	1.00 0.63 0.46 0.25

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2570: Stargo-----	70	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Somewhat limited Flooding	0.60
Playas-----	20	Not rated		Not rated		Not rated	
2580: Wardenot-----	50	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.94 0.01
Izo-----	35	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Droughty Gravel content Flooding Too sandy Content of large stones	1.00 1.00 0.60 0.50 0.11
2601: Cobatus-----	65	Somewhat limited Shrink-swell	0.50	Somewhat limited Depth to saturated zone Cutbanks cave	0.90 0.10	Very limited Salinity Sodium content	1.00 1.00
Kawich-----	25	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Salinity	0.92 0.50
2611: Corbilt-----	85	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Content of large stones	1.00 0.01
2630: Wechech-----	55	Somewhat limited Depth to thin cemented pan Slope	1.00 0.04	Very limited Depth to thin cemented pan Cutbanks cave Slope	1.00 0.10 0.04	Very limited Depth to cemented pan Droughty Gravel content Slope Content of large stones	1.00 1.00 0.22 0.04 0.01
Commski-----	40	Somewhat limited Slope	0.04	Very limited Cutbanks cave Slope	1.00 0.04	Very limited Droughty Gravel content Slope Content of large stones	1.00 1.00 0.04 0.03

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2640: Downeyville-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20
Advokay-----	35	Somewhat limited Depth to soft bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 0.63 0.10	Very limited Depth to bedrock Droughty Slope Gravel content	1.00 1.00 0.63 0.50
Pintwater-----	15	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.24	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.24 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.03
2641: Advokay-----	35	Somewhat limited Depth to soft bedrock Slope Shrink-swell	1.00 0.63 0.50	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 0.63 0.10	Very limited Depth to bedrock Droughty Slope Gravel content	1.00 1.00 0.63 0.50
Ardivay-----	30	Somewhat limited Content of large stones	0.02	Very limited Cutbanks cave Content of large stones	1.00 0.02	Very limited Gravel content Droughty Content of large stones	1.00 0.90 0.03
Leo-----	20	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content	0.99 0.50
2642: Advokay-----	65	Somewhat limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.16	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 0.16 0.10	Very limited Depth to bedrock Droughty Gravel content Slope	1.00 1.00 0.50 0.16

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Blacktop-----	20	Very limited		Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00	Depth to bedrock	1.00
		bedrock		bedrock			
		Slope	1.00	Slope	1.00	Droughty	1.00
		Content of large	0.68	Content of large	0.68	Slope	1.00
		stones		stones			
				Cutbanks cave	0.10	Content of large	1.00
						stones	
						Gravel content	0.20
2650:							
Luning-----	40	Somewhat limited		Very limited		Very limited	
		Flooding	0.40	Cutbanks cave	1.00	Droughty	1.00
Wardenot-----	30	Somewhat limited		Very limited		Somewhat limited	
		Flooding	0.40	Cutbanks cave	1.00	Droughty	0.79
						Gravel content	0.50
Izo-----	20	Very limited		Very limited		Very limited	
		Flooding	1.00	Cutbanks cave	1.00	Droughty	1.00
				Flooding	0.60	Gravel content	1.00
						Flooding	0.60
						Too sandy	0.50
						Content of large	0.11
						stones	
2660:							
Stonell-----	35	Not limited		Very limited		Very limited	
				Cutbanks cave	1.00	Salinity	1.00
						Droughty	0.97
						Gravel content	0.41
Wardenot-----	30	Somewhat limited		Very limited		Very limited	
		Flooding	0.40	Cutbanks cave	1.00	Gravel content	1.00
						Droughty	0.82
						Content of large	0.01
						stones	
Izo-----	20	Very limited		Very limited		Very limited	
		Flooding	1.00	Cutbanks cave	1.00	Droughty	1.00
				Flooding	0.60	Gravel content	1.00
						Flooding	0.60
						Too sandy	0.50
						Content of large	0.11
						stones	
2670:							
Ardivay-----	65	Somewhat limited		Very limited		Very limited	
		Content of large	0.02	Cutbanks cave	1.00	Gravel content	1.00
		stones					
				Content of large	0.02	Droughty	0.90
				stones			
						Content of large	0.03
						stones	

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Izo-----	20	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Droughty Gravel content Flooding Too sandy Content of large stones	1.00 1.00 0.60 0.50 0.11
2671: Ardivey-----	45	Somewhat limited Content of large stones	0.02	Very limited Cutbanks cave Content of large stones	1.00 0.02	Very limited Gravel content Droughty Content of large stones	1.00 0.90 0.03
Stonell-----	20	Not limited		Very limited Cutbanks cave	1.00	Very limited Salinity Droughty Gravel content	1.00 0.97 0.41
Izo-----	20	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Droughty Gravel content Flooding Too sandy Content of large stones	1.00 1.00 0.60 0.50 0.11
2680: Espint-----	35	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 1.00	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.03
Vindicator-----	30	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 0.50	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
Espint-----	20	Very limited Depth to soft bedrock Shrink-swell Slope	1.00 1.00 0.04	Very limited Depth to soft bedrock Cutbanks cave Slope	1.00 0.10 0.04	Very limited Depth to bedrock Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.04 0.03

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2681: Espint-----	40	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 1.00	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.03
Stewval-----	30	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
Vindicator-----	15	Very limited Slope Depth to soft bedrock Shrink-swell	1.00 1.00 1.00 0.50	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Slope Droughty Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
2682: Espint-----	30	Very limited Depth to soft bedrock Slope Shrink-swell	1.00 1.00 1.00	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.03
Gabbvally-----	30	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
Stewval-----	25	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2690: Leo-----	55	Not limited		Very limited Cutbanks cave	1.00	Very limited Droughty Gravel content	0.99 0.50
Izo-----	35	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Droughty Gravel content Flooding Too sandy Content of large stones	1.00 1.00 0.60 0.50 0.11
2701: Cobatus-----	90	Somewhat limited Shrink-swell	0.50	Somewhat limited Depth to saturated zone Cutbanks cave	0.90 0.10	Very limited Salinity Sodium content	1.00 1.00
2710: Papoose-----	35	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.26 0.18
Vindicator-----	35	Somewhat limited Depth to soft bedrock Shrink-swell Slope	1.00 0.50 0.04	Very limited Depth to soft bedrock Cutbanks cave Slope	1.00 0.10 0.04	Very limited Depth to bedrock Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 0.04 0.01
Espint-----	15	Very limited Depth to soft bedrock Shrink-swell	1.00 1.00	Very limited Depth to soft bedrock Cutbanks cave	1.00 0.10	Very limited Depth to bedrock Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.03
2720: Unsel-----	40	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Droughty Gravel content	1.00 0.42 0.32
Stonell-----	30	Not limited		Very limited Cutbanks cave	1.00	Very limited Salinity Droughty Gravel content	1.00 0.97 0.41
Veet-----	20	Somewhat limited Frost action Flooding	0.50 0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.98 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2730: Gabbvally-----	35	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 1.00 0.01
Blacktop-----	30	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 1.00 0.68	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 1.00 0.68 0.10	Very limited Depth to bedrock Slope Droughty Content of large stones Gravel content	1.00 1.00 1.00 1.00 1.00 0.20
Espint-----	20	Very limited Depth to soft bedrock Shrink-swell Slope	1.00 1.00 1.00 1.00	Very limited Depth to soft bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 1.00 1.00 0.03
2731: Gabbvally-----	35	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 1.00 0.01
Downeyville-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 1.00 0.20
Vindicator-----	25	Somewhat limited Depth to soft bedrock Shrink-swell Slope	1.00 1.00 0.50 0.04	Very limited Depth to soft bedrock Cutbanks cave Slope	1.00 1.00 0.10 0.04	Very limited Depth to bedrock Droughty Gravel content Slope Content of large stones	1.00 1.00 1.00 1.00 1.00 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2732: Gabbvally-----	40	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
Tognoni-----	25	Very limited Depth to hard bedrock Slope Shrink-swell Content of large stones	1.00 1.00 0.50 0.31	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.31 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 0.33 0.01
Downeyville-----	20	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20
2734: Gabbvally-----	70	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Droughty Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
Downeyville-----	20	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Droughty Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20
2735: Gabbvally-----	45	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Wahguyhe-----	25	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Droughty Gravel content	1.00 1.00 1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2736: Gabbvally-----	35	Very limited Depth to hard bedrock Slope Frost action	1.00 1.00 0.50	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Droughty Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01
Brier-----	35	Very limited Depth to hard bedrock Slope Content of large stones Shrink-swell Frost action	1.00 1.00 0.65 0.50 0.50	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.65 0.10	Very limited Depth to bedrock Slope Droughty Content of large stones Gravel content	1.00 1.00 1.00 1.00 0.01
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2740: Tognoni-----	65	Very limited Depth to hard bedrock Slope Shrink-swell Content of large stones	1.00 1.00 0.50 0.31	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 0.31 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 0.33 0.01
Blacktop-----	20	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Slope Droughty Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.01

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2741: Blacktop-----	50	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 1.00 0.68	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 1.00 0.68 0.10	Very limited Depth to bedrock Slope Droughty Content of large stones Gravel content	1.00 1.00 1.00 1.00 1.00 0.20
Downeyville-----	20	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 1.00 0.20
Tognoni-----	20	Very limited Depth to hard bedrock Slope Content of large stones Shrink-swell	1.00 1.00 1.00 0.88 0.50	Very limited Depth to hard bedrock Slope Content of large stones Cutbanks cave	1.00 1.00 1.00 0.88 0.10	Very limited Depth to bedrock Droughty Slope Content of large stones Gravel content	1.00 1.00 1.00 1.00 1.00 0.26
2750: Silverbow-----	50	Somewhat limited Depth to thin cemented pan Content of large stones	1.00 0.70	Very limited Depth to thin cemented pan Content of large stones Cutbanks cave	1.00 1.00 0.70 0.10	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.38 0.08
Wardenot-----	20	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.94 0.01
Izo-----	15	Very limited Flooding	1.00	Very limited Cutbanks cave Flooding	1.00 0.60	Very limited Droughty Gravel content Flooding Too sandy Content of large stones	1.00 1.00 0.60 0.50 0.11

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2760: Downeyville-----	35	Very limited Depth to hard bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 1.00 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.20
Unsel-----	30	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16	Very limited Sodium content Droughty Gravel content Slope	1.00 0.42 0.32 0.16
Tokoper-----	20	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones	1.00 1.00 0.16 0.11	Very limited Depth to hard bedrock Depth to thin cemented pan Slope Content of large stones Cutbanks cave	1.00 1.00 0.16 0.11 0.10	Very limited Depth to bedrock Depth to cemented pan Content of large stones Droughty Slope	1.00 1.00 1.00 1.00 1.00 0.16
2770: Bullfor-----	50	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.90	Very limited Droughty Depth to cemented pan	1.00 0.90
Panor-----	30	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content	1.00 1.00
Bluepoint-----	15	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16	Somewhat limited Droughty Slope	0.62 0.16
2781: Haymont-----	50	Not limited		Somewhat limited Cutbanks cave	0.10	Very limited Sodium content	1.00
Bluepoint-----	20	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty	0.62
Panor-----	15	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content	1.00 1.00
2810: Ashmed, moist-----	50	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Salinity Gravel content	1.00 0.50 0.18

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Yermo-----	20	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Niavi-----	15	Very limited Flooding Content of large stones	1.00 0.01	Very limited Cutbanks cave Flooding Content of large stones	1.00 0.60 0.01	Very limited Content of large stones Droughty Flooding Gravel content	1.00 1.00 0.60 0.57
2820: Strozi-----	60	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.29	Somewhat limited Salinity Gravel content Droughty Depth to cemented pan	0.50 0.50 0.30 0.29
Corbilt-----	30	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Gravel content	0.32
2840: Armpup-----	60	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content	1.00 1.00
Strozi-----	35	Not limited		Very limited Cutbanks cave Depth to thin cemented pan	1.00 0.29	Somewhat limited Salinity Depth to cemented pan Droughty	0.50 0.29 0.22
2850: Scottcas-----	50	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.99 0.03
Yermo-----	35	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2860: Sezna-----	50	Somewhat limited Depth to thin cemented pan Shrink-swell Content of large stones	1.00 0.50 0.18	Very limited Depth to thin cemented pan Content of large stones Cutbanks cave	1.00 0.18 0.10	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 0.33 0.01
Yermo-----	35	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
2870: Kanackey-----	85	Very limited Depth to hard bedrock Slope Content of large stones Shrink-swell	1.00 1.00 0.94 0.50	Very limited Depth to hard bedrock Slope Content of large stones Too clayey Cutbanks cave	1.00 1.00 0.94 0.50 0.10	Very limited Depth to bedrock Droughty Slope Gravel content Content of large stones	1.00 1.00 1.00 1.00 0.54
2880: Bacho-----	45	Somewhat limited Depth to thin cemented pan Shrink-swell	1.00 0.50	Very limited Depth to thin cemented pan Cutbanks cave Too clayey	1.00 0.10 0.03	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.11
Yermo-----	25	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
Arizo-----	15	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty	1.00 1.00
2890: Nopah-----	35	Somewhat limited Shrink-swell	0.50	Somewhat limited Cutbanks cave	0.10	Very limited Carbonate content	1.00
Woda-----	30	Somewhat limited Depth to thin cemented pan Slope	1.00 0.04	Very limited Depth to thin cemented pan Cutbanks cave Slope	1.00 0.10 0.04	Very limited Depth to cemented pan Carbonate content Droughty Salinity Gravel content	1.00 1.00 0.87 0.50 0.25

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Gullied Land-----	20	Not rated		Not rated		Not rated	
2900: Playas-----	100	Not rated		Not rated		Not rated	
2901: Playas-----	40	Not rated		Not rated		Not rated	
Corbilt-----	30	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Gravel content	0.32
Bluepoint-----	20	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty	0.62
2903: Playas-----	45	Not rated		Not rated		Not rated	
Mobl-----	30	Not limited		Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content Droughty	1.00 1.00 0.18
Kawich-----	15	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Droughty Salinity	0.92 0.50
2910: Dune Land-----	100	Not rated		Not rated		Not rated	
2920: Dumps-----	100	Not rated		Not rated		Not rated	

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2930:							
Seralin-----	55	Very limited		Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00	Depth to bedrock	1.00
		bedrock		bedrock			
		Slope	1.00	Slope	1.00	Slope	1.00
				Cutbanks cave	0.10	Droughty	1.00
						Gravel content	1.00
						Content of large	0.84
						stones	
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
Sed-----	15	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard	1.00	Slope	1.00
				bedrock			
		Depth to hard	0.90	Cutbanks cave	1.00	Gravel content	1.00
		bedrock					
		Shrink-swell	0.50	Slope	1.00	Droughty	0.97
		Frost action	0.50			Depth to bedrock	0.90
						Content of large	0.01
						stones	
2940:							
Schader-----	40	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard	1.00	Slope	1.00
				bedrock			
		Depth to hard	0.64	Cutbanks cave	1.00	Droughty	1.00
		bedrock					
		Frost action	0.50	Slope	1.00	Gravel content	1.00
						Content of large	0.68
						stones	
						Depth to bedrock	0.65
Sed-----	30	Very limited		Very limited		Very limited	
		Slope	1.00	Depth to hard	1.00	Slope	1.00
				bedrock			
		Depth to hard	0.90	Cutbanks cave	1.00	Gravel content	1.00
		bedrock					
		Shrink-swell	0.50	Slope	1.00	Droughty	0.97
		Frost action	0.50			Depth to bedrock	0.90
						Content of large	0.01
						stones	
Cruzspring-----	15	Very limited		Very limited		Very limited	
		Depth to hard	1.00	Depth to hard	1.00	Depth to bedrock	1.00
		bedrock		bedrock			
		Depth to soft	1.00	Depth to soft	1.00	Gravel content	1.00
		bedrock		bedrock			
		Slope	1.00	Slope	1.00	Droughty	1.00
		Frost action	0.50	Cutbanks cave	0.10	Slope	1.00
						Content of large	0.11
						stones	

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2950: Pits-----	100	Not rated		Not rated		Not rated	
2951: Pits-----	100	Not rated		Not rated		Not rated	
2960: Tomel-----	35	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00	Very limited Depth to cemented pan Gravel content Droughty	1.00 1.00 1.00
Ardivey-----	30	Somewhat limited Content of large stones	0.02	Very limited Cutbanks cave Content of large stones	1.00 0.02	Very limited Gravel content Droughty Content of large stones	1.00 0.90 0.03
Wardenot-----	20	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.94 0.01
2961: Tomel-----	55	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00	Very limited Depth to cemented pan Gravel content Droughty	1.00 1.00 1.00
Breko-----	15	Somewhat limited Shrink-swell Frost action	0.50 0.50	Very limited Cutbanks cave	1.00	Somewhat limited Gravel content Droughty	0.25 0.03
Wardenot-----	15	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Somewhat limited Droughty Gravel content	0.79 0.50
2970: Destazo-----	40	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Carbonate content Gravel content Droughty	1.00 0.68 0.04
Nowoy-----	30	Somewhat limited Shrink-swell Flooding	0.50 0.40	Very limited Cutbanks cave	1.00	Very limited Carbonate content Gravel content	1.00 0.32

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Gullied Land-----	20	Not rated		Not rated		Not rated	
2971: Upspring-----	85	Very limited Depth to hard bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope Cutbanks cave	1.00 0.63 0.10	Very limited Depth to bedrock Gravel content Droughty Slope Content of large stones	1.00 1.00 1.00 0.63 0.01
2990: Lealandic-----	60	Very limited Shrink-swell	1.00	Very limited Cutbanks cave Depth to thin cemented pan Too clayey	1.00 0.95 0.03	Very limited Gravel content Droughty Depth to cemented pan Content of large stones	1.00 1.00 0.95 0.01
Ashmed-----	30	Not limited		Very limited Cutbanks cave	1.00	Very limited Sodium content Salinity Gravel content	1.00 0.50 0.18
3021: Casaga-----	45	Somewhat limited Shrink-swell Frost action	0.50 0.50	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content Gravel content	1.00 1.00 0.41
Destazo-----	25	Somewhat limited Shrink-swell	0.50	Very limited Cutbanks cave	1.00	Very limited Carbonate content Gravel content Droughty	1.00 0.68 0.04
Yurm-----	20	Not limited		Somewhat limited Cutbanks cave	0.10	Very limited Depth to cemented pan Droughty Salinity Gravel content	1.00 1.00 0.50 0.50
3022: Casaga-----	40	Somewhat limited Shrink-swell Flooding	0.50 0.40	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content Gravel content	1.00 1.00 1.00

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Woda-----	35	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 0.10	Very limited Depth to cemented pan Carbonate content Droughty Salinity	1.00 1.00 0.86 0.50
Yermo-----	20	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
3052: Bobnbob-----	65	Somewhat limited Shrink-swell Frost action Flooding	0.50 0.50 0.40	Somewhat limited Depth to saturated zone Cutbanks cave	0.35 0.10	Somewhat limited Salinity	0.50
Caslo-----	20	Very limited Flooding Depth to saturated zone Shrink-swell	1.00 0.75 0.50	Very limited Depth to saturated zone Flooding Too clayey Cutbanks cave	1.00 0.60 0.50 0.10	Very limited Salinity Sodium content Carbonate content Depth to saturated zone Flooding	1.00 1.00 1.00 0.75 0.60
3101: Bluepoint-----	45	Somewhat limited Slope	0.16	Very limited Cutbanks cave Slope	1.00 0.16	Somewhat limited Droughty Slope	0.62 0.16
Besherm-----	40	Very limited Shrink-swell	1.00	Somewhat limited Too clayey Cutbanks cave	0.50 0.10	Very limited Salinity Sodium content Carbonate content	1.00 1.00 1.00
3120: Nowoy-----	45	Somewhat limited Shrink-swell Flooding	0.50 0.40	Very limited Cutbanks cave	1.00	Very limited Carbonate content Gravel content	1.00 0.32
Tanazza-----	25	Somewhat limited Shrink-swell	0.50	Somewhat limited Cutbanks cave	0.10	Very limited Gravel content Carbonate content	1.00 1.00
Yurm-----	20	Not limited		Somewhat limited Cutbanks cave	0.10	Very limited Depth to cemented pan Droughty Gravel content Salinity	1.00 1.00 1.00 0.50

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3150: Casaga-----	85	Somewhat limited Shrink-swell Frost action	0.50 0.50	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content Gravel content	1.00 1.00 0.41
3230: Alko-----	60	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Salinity Sodium content Droughty	1.00 1.00 1.00 1.00
Casaga-----	30	Somewhat limited Shrink-swell Flooding	0.50 0.40	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content Gravel content	1.00 1.00 0.50
3252: Bobnbob-----	70	Very limited Flooding Shrink-swell	1.00 0.50	Somewhat limited Depth to saturated zone Flooding Cutbanks cave	0.82 0.60 0.10	Somewhat limited Flooding Salinity	0.60 0.50
Cobatus-----	15	Somewhat limited Shrink-swell	0.50	Somewhat limited Depth to saturated zone Cutbanks cave	0.90 0.10	Very limited Salinity Sodium content	1.00 1.00
3302: Rumpah-----	90	Very limited Shrink-swell	1.00	Very limited Cutbanks cave Too clayey	1.00 0.72	Very limited Sodium content Too clayey	1.00 1.00
3313: Besherm-----	85	Very limited Shrink-swell	1.00	Somewhat limited Too clayey Cutbanks cave	0.50 0.10	Very limited Salinity Sodium content Carbonate content	1.00 1.00 1.00
3320: Raymont-----	85	Not limited		Somewhat limited Cutbanks cave	0.10	Very limited Sodium content	1.00
3333: Nopah-----	85	Somewhat limited Shrink-swell	0.50	Somewhat limited Cutbanks cave	0.10	Very limited Carbonate content	1.00
4010: Tanazza-----	35	Somewhat limited Shrink-swell	0.50	Somewhat limited Cutbanks cave	0.10	Very limited Carbonate content	1.00

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Wechech-----	35	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 0.10	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.03
Wodavar-----	15	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 1.00	Very limited Depth to cemented pan Gravel content Droughty Carbonate content	1.00 1.00 1.00 1.00
4030: Wechech-----	45	Somewhat limited Depth to thin cemented pan	1.00	Very limited Depth to thin cemented pan Cutbanks cave	1.00 0.10	Very limited Depth to cemented pan Droughty Gravel content Content of large stones	1.00 1.00 0.22 0.01
Nopah-----	20	Somewhat limited Shrink-swell	0.50	Somewhat limited Cutbanks cave	0.10	Very limited Carbonate content	1.00
Yermo-----	20	Not limited		Very limited Cutbanks cave	1.00	Very limited Gravel content Droughty Content of large stones	1.00 0.69 0.20
4060: Besherm-----	70	Very limited Shrink-swell	1.00	Somewhat limited Too clayey Cutbanks cave	0.50 0.10	Very limited Salinity Sodium content Carbonate content	1.00 1.00 1.00
Tanazza-----	15	Somewhat limited Shrink-swell	0.50	Somewhat limited Cutbanks cave	0.10	Very limited Carbonate content	1.00
4070: Gynelle-----	35	Somewhat limited Flooding Content of large stones	0.40 0.01	Very limited Cutbanks cave Content of large stones	1.00 0.01	Very limited Sodium content Droughty Gravel content Content of large stones	1.00 1.00 1.00 0.01
Kawich-----	25	Very limited Slope	1.00	Very limited Cutbanks cave Slope	1.00 1.00	Very limited Slope Droughty Salinity	1.00 0.92 0.50

TABLE 8b.--BUILDING SITE DEVELOPMENT--Continued

Map symbol and soil name	Pct. of map unit	Local roads and streets		Shallow excavations		Lawns and landscaping	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Cirac-----	25	Somewhat limited Flooding	0.40	Very limited Cutbanks cave	1.00	Very limited Salinity Sodium content Gravel content	1.00 1.00 0.50
4071: Corbilt-----	85	Not limited		Very limited Cutbanks cave	1.00	Somewhat limited Gravel content	0.32
4080: Water-----	100	Not rated		Not rated		Not rated	

TABLE 9a.--SANITARY FACILITIES

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1314: Weiser-----	70	Not limited		Very limited Seepage	1.00
				Slope	0.67
Wechech-----	15	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
				Seepage	1.00
				Slope	0.67
1315: Lastchance-----	40	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Slope	0.01	Slope	1.00
				Seepage	0.50
Lastchance, upper elevation fans-----	30	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Slope	0.01	Slope	1.00
				Seepage	0.50
Commski-----	15	Somewhat limited Restricted permeability	0.50	Very limited Seepage	1.00
				Slope	0.67
1316: Lastchance-----	40	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Slope	0.01	Slope	1.00
				Seepage	0.50
Ferrogold-----	30	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Slope	0.01	Slope	1.00
				Seepage	0.50
Commski-----	15	Somewhat limited Restricted permeability	0.50	Very limited Seepage	1.00
				Slope	0.67

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1317: Commski-----	70	Somewhat limited Restricted permeability	0.50	Very limited Seepage	1.00
				Slope	0.67
Lastchance-----	15	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
				Slope	0.67
				Seepage	0.50
1320: Boxspring-----	50	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Zeheme-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	1.00
Rock Outcrop-----	15	Not rated		Not rated	
1321: Boxspring-----	40	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Seralin-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Rock Outcrop-----	15	Not rated		Not rated	
1340: Longjim-----	70	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Slope	0.16	Seepage	1.00
				Slope	1.00
Niavi-----	15	Very limited Flooding	1.00	Very limited Flooding	1.00
		Filtering	1.00	Seepage	1.00
		capacity			
		Content of large stones	0.01	Content of large stones	0.38
				Slope	0.33

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
1871:					
Irongold-----	45	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.67
Irongold-----	25	Very limited Depth to cemented pan Slope	1.00 0.63	Very limited Depth to cemented pan Slope Seepage	1.00 1.00 1.00
Weiser-----	15	Not limited		Very limited Seepage Slope	1.00 0.67
2002:					
Rock Outcrop-----	45	Not rated		Not rated	
Upspring-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Rubble Land-----	15	Not rated		Not rated	
2004:					
Rock Outcrop-----	55	Not rated		Not rated	
Zyplar-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
2005:					
Rock Outcrop-----	50	Not rated		Not rated	
St. Thomas-----	20	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.09
St. Thomas-----	15	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.56	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.08

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2010: Longjim-----	90	Very limited Depth to cemented pan Slope	1.00 0.16	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00
2011: Sanwell-----	45	Very limited Filtering capacity Restricted permeability	1.00 0.50	Very limited Seepage Slope	1.00 0.01
Sanwell-----	40	Very limited Filtering capacity Restricted permeability	1.00 0.50	Very limited Seepage	1.00
2012: Zalda-----	45	Very limited Depth to bedrock Depth to cemented pan	1.00 1.00	Very limited Depth to hard bedrock Depth to cemented pan Slope	1.00 1.00 0.67
Greyeagle-----	30	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Slope Seepage	1.00 1.00 1.00
Upspring-----	15	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 1.00
2013: Longjim-----	45	Very limited Depth to cemented pan Slope	1.00 0.16	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00
Yurm-----	40	Very limited Depth to cemented pan Slope	1.00 0.16	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00
2020: Weiser-----	70	Not limited		Very limited Seepage Slope	1.00 0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Canoto-----	25	Not limited		Very limited Seepage	1.00
				Slope	0.09
2021: Weiser-----	70	Not limited		Very limited Seepage	1.00
				Slope	0.09
Nickel-----	25	Somewhat limited Slope	0.16	Very limited Seepage	1.00
				Slope	1.00
2023: Commski-----	35	Very limited Slope	1.00	Very limited Slope	1.00
		Restricted permeability	0.50	Seepage	1.00
Commski-----	30	Somewhat limited Restricted permeability	0.50	Very limited Seepage	1.00
				Slope	0.67
Sezna-----	20	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Content of large stones	0.18	Content of large stones	0.76
				Slope	0.09
2030: Corbilt-----	85	Somewhat limited Depth to cemented pan	0.47	Very limited Seepage	1.00
				Slope	0.09
				Depth to cemented pan	0.05
2031: Corbilt-----	60	Somewhat limited Depth to cemented pan	0.47	Very limited Seepage	1.00
				Slope	0.91
				Depth to cemented pan	0.05
Skelon-----	35	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
				Seepage	1.00
				Slope	0.91

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2040:					
Yurm-----	70	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.67
Canoto-----	15	Not limited		Very limited Seepage Slope	1.00 0.09
Yurm, moist-----	10	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.67
2050:					
Canoto-----	50	Not limited		Very limited Seepage Slope	1.00 0.09
Naye-----	35	Very limited Depth to cemented pan Restricted permeability	1.00 0.50	Very limited Depth to cemented pan Seepage Slope	1.00 0.50 0.09
2051:					
Yermo-----	35	Not limited		Very limited Seepage Slope	1.00 0.09
Woda-----	30	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Slope	1.00 0.09
Nowoy-----	20	Very limited Restricted permeability Flooding	1.00 0.40	Very limited Seepage Slope Flooding	1.00 0.67 0.40
2052:					
Canoto-----	85	Not limited		Very limited Seepage Slope	1.00 0.09
2053:					
Yermo-----	60	Very limited Slope	1.00	Very limited Slope Seepage	1.00 1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Greyeagle-----	20	Very limited Depth to cemented pan Slope	1.00 0.63	Very limited Depth to cemented pan Slope Seepage	1.00 1.00 1.00
Arizo-----	15	Very limited Filtering capacity Flooding Slope Content of large stones	1.00 0.40 0.16 0.05	Very limited Seepage Slope Content of large stones Flooding	1.00 1.00 1.00 0.40
2054: Yermo, hot-----	40	Not limited		Very limited Seepage Slope	1.00 0.09
Yermo-----	30	Not limited		Very limited Seepage Slope	1.00 0.09
Arizo-----	15	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.09
2055: Canoto-----	60	Not limited		Very limited Seepage Slope	1.00 0.67
Canoto, MOIST-----	25	Not limited		Very limited Seepage Slope	1.00 0.09
2057: Yermo-----	50	Not limited		Very limited Seepage Slope	1.00 0.01
Commski-----	40	Somewhat limited Restricted permeability	0.50	Very limited Seepage	1.00
2058: Canoto-----	50	Not limited		Very limited Seepage Slope	1.00 0.09
Nickel-----	40	Somewhat limited Slope	0.04	Very limited Seepage Slope	1.00 1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2060: Purob-----	60	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Slope Seepage	1.00 0.67 0.50
Irongold-----	25	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.67
2061: Vace-----	95	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00
2062: Purob-----	75	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Slope Seepage	1.00 1.00 1.00
Niavi-----	10	Very limited Flooding Filtering capacity Content of large stones	1.00 1.00 0.01	Very limited Flooding Seepage Content of large stones Slope	1.00 1.00 0.38 0.33
2064: Longjim, summer precip.-----	55	Very limited Depth to cemented pan Slope	1.00 0.16	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00
Purob-----	20	Very limited Depth to cemented pan Slope	1.00 0.04	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00
Niavi-----	10	Very limited Flooding Filtering capacity Content of large stones	1.00 1.00 0.01	Very limited Flooding Seepage Content of large stones Slope	1.00 1.00 0.38 0.33

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2070: Shamock-----	90	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
2071: Shamock-----	45	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.01
Skelon-----	40	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.01
2080: St. Thomas-----	35	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.09
Rock Outcrop-----	30	Not rated		Not rated	
Commski-----	20	Somewhat limited Slope Restricted permeability	0.63 0.50	Very limited Slope Seepage	1.00 1.00
2081: St. Thomas-----	45	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.09
Tecopa-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated	
2090: Breko-----	55	Very limited Restricted permeability Filtering capacity	1.00 1.00	Very limited Seepage Slope	1.00 0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Veet-----	35	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Flooding	0.40	Flooding Slope	0.40 0.09
2110: Pahrump-----	90	Very limited Restricted permeability Slope	1.00 0.16	Very limited Slope Seepage	1.00 0.50
2121: Commski-----	60	Somewhat limited Restricted permeability	0.50	Very limited Seepage Slope	1.00 0.01
Arizo-----	30	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.01
2131: Upspring-----	55	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Shorim-----	20	Very limited Depth to bedrock Depth to cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to cemented pan Slope Seepage	1.00 1.00 1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated	
2140: Jonnic-----	75	Very limited Depth to cemented pan Restricted permeability Content of large stones	1.00 1.00 0.03	Very limited Depth to cemented pan Slope	1.00 0.91
Niavi-----	10	Very limited Flooding Filtering capacity Content of large stones	1.00 1.00 0.01	Very limited Flooding Seepage Content of large stones Slope	1.00 1.00 0.38 0.33

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2151:					
Arizo-----	40	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage	1.00 1.00
Bluepoint-----	35	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
Dune Land-----	15	Not rated		Not rated	
2152:					
Arizo-----	85	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage	1.00 1.00
2153:					
Arizo-----	35	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage	1.00 1.00
Corbilt-----	25	Somewhat limited Depth to cemented pan	0.78	Very limited Seepage Depth to cemented pan	1.00 0.42
Commski-----	25	Somewhat limited Restricted permeability	0.50	Very limited Seepage	1.00
2161:					
Casaga-----	55	Very limited Restricted permeability Flooding	1.00 0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.09
Nowoy-----	30	Very limited Restricted permeability Flooding	1.00 0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.09
2162:					
Casaga-----	40	Very limited Restricted permeability	1.00	Very limited Seepage Slope	1.00 0.09
Panor-----	25	Very limited Restricted permeability	1.00	Somewhat limited Slope	0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Yermo-----	20	Not limited		Very limited Seepage	1.00
				Slope	0.09
2171: Sanwell-----	60	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Restricted permeability	0.50	Slope	0.09
Skelon-----	30	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
				Seepage	1.00
				Slope	0.09
2172: Sanwell-----	60	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Restricted permeability	0.50	Slope	0.67
Yermo-----	35	Not limited		Very limited Seepage	1.00
				Slope	0.67
2181: Skelon-----	30	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
				Seepage	1.00
				Slope	0.09
Yermo-----	30	Not limited		Very limited Seepage	1.00
Pinez-----	25	Very limited Restricted permeability	1.00	Very limited Seepage	1.00
		Filtering capacity	1.00	Depth to cemented pan	0.99
		Depth to cemented pan	1.00	Slope	0.09
2184: Skelon-----	60	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
				Seepage	1.00
Bullfor-----	25	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Filtering capacity	1.00	Seepage	1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2185: Skelon-----	50	Very limited Depth to cemented pan Slope	1.00 0.16	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00
Yermo-----	30	Somewhat limited Slope	0.16	Very limited Seepage Slope	1.00 1.00
Ashmed-----	15	Very limited Restricted permeability Filtering capacity	1.00 1.00	Very limited Seepage Slope	1.00 0.91
2186: Yermo-----	35	Not limited		Very limited Seepage	1.00
Skelon-----	35	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
Pinez-----	15	Very limited Restricted permeability Filtering capacity Depth to cemented pan	1.00 1.00 1.00	Very limited Seepage Depth to cemented pan Slope	1.00 0.99 0.09
2191: Pinez-----	40	Very limited Restricted permeability Filtering capacity Depth to cemented pan	1.00 1.00 1.00	Very limited Seepage Depth to cemented pan Slope	1.00 0.99 0.09
Lealandic-----	35	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Slope	1.00 0.09
Arizo-----	20	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Flooding	1.00 0.40

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2201: Corbilt-----	65	Somewhat limited Depth to cemented pan	0.47	Very limited Seepage Slope Depth to cemented pan	1.00 0.09 0.05
Arizo-----	30	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.09
2202: Corbilt-----	50	Somewhat limited Depth to cemented pan	0.47	Very limited Seepage Slope Depth to cemented pan	1.00 0.67 0.05
Migern-----	25	Very limited Filtering capacity	1.00	Very limited Seepage Slope	1.00 0.67
Arizo-----	20	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.09
2204: Corbilt-----	40	Somewhat limited Depth to cemented pan	0.47	Very limited Seepage Slope Depth to cemented pan	1.00 0.09 0.05
Wodavar-----	25	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.67
Sanwell-----	25	Very limited Filtering capacity Restricted permeability	1.00 0.50	Very limited Seepage Slope	1.00 0.67
2212: Yermo-----	70	Not limited		Very limited Seepage Slope	1.00 0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Bullfor-----	20	Very limited Depth to cemented pan Filtering capacity	1.00 1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
2214: Yermo-----	65	Not limited		Very limited Seepage Slope	1.00 0.09
Arizo-----	30	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.09
2215: Yermo-----	60	Not limited		Very limited Seepage Slope	1.00 0.09
Greyeagle-----	25	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
2216: Yermo-----	65	Not limited		Very limited Seepage Slope	1.00 0.09
Arizo-----	20	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Flooding Slope	1.00 1.00 0.40 0.09
2218: Sanwell-----	50	Very limited Filtering capacity Restricted permeability	1.00 0.50	Very limited Seepage Slope	1.00 1.00 0.09
Commski-----	45	Somewhat limited Restricted permeability	0.50	Very limited Seepage Slope	1.00 1.00 0.09
2220: Canoto-----	65	Not limited		Very limited Seepage Slope	1.00 1.00 0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields	Sewage lagoons	
		Rating class and limiting features	Rating class and limiting features	Value
Arizo-----	20	Very limited Flooding Filtering capacity	Very limited Flooding Seepage Slope	1.00 1.00 1.00 0.09
2221: Sanwell-----	60	Very limited Filtering capacity Restricted permeability	Very limited Seepage Slope	1.00 1.00 0.09
Greyeagle-----	30	Very limited Depth to cemented pan	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00 0.09
2222: Niavi-----	55	Very limited Flooding Filtering capacity Content of large stones	Very limited Flooding Seepage Content of large stones Slope	1.00 1.00 1.00 0.38 0.33
Jonnic-----	35	Very limited Depth to cemented pan Restricted permeability Content of large stones	Very limited Depth to cemented pan Slope	1.00 1.00 0.67 0.03
2230: Yermo-----	60	Not limited	Very limited Seepage Slope	1.00 0.09
Skelon-----	25	Very limited Depth to cemented pan	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00 0.09
2233: Yermo-----	35	Not limited	Very limited Seepage Slope	1.00 0.91
Skelon-----	25	Very limited Depth to cemented pan	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00 0.91

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Bluepoint-----	25	Very limited Filtering capacity Slope	1.00 0.63	Very limited Slope Seepage	1.00 1.00
2250: Tokoper-----	40	Very limited Depth to bedrock Depth to cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to cemented pan Slope Seepage Content of large stones	1.00 1.00 1.00 0.50 0.04
Upspring-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated	
2251: Tokoper-----	35	Very limited Depth to bedrock Depth to cemented pan Slope Content of large stones	1.00 1.00 0.63 0.11	Very limited Depth to hard bedrock Depth to cemented pan Slope Seepage Content of large stones	1.00 1.00 1.00 0.50 0.04
Downeyville-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Pintwater-----	20	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.73

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2252: Tokoper-----	55	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Slope	0.63	Slope	1.00
		Content of large stones	0.11	Seepage	0.50
				Content of large stones	0.04
Blacktop-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.68		
2253: Tokoper-----	60	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Slope	0.16	Slope	1.00
		Content of large stones	0.11	Seepage	0.50
				Content of large stones	0.04
Ardivey-----	25	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Content of large stones	0.02	Slope	0.67
				Content of large stones	0.05
2254: Tokoper-----	35	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.11	Seepage	0.50
				Content of large stones	0.04
Downeyville-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	0.63	Slope	1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Espint-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
2260: Greyeagle-----	85	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.67
2261: Longjim-----	40	Very limited Depth to cemented pan Slope	1.00 0.63	Very limited Depth to cemented pan Slope Seepage	1.00 1.00 1.00
Yermo-----	25	Somewhat limited Slope	0.04	Very limited Seepage Slope	1.00 1.00
Dedas-----	20	Very limited Depth to bedrock Depth to cemented pan Slope	1.00 1.00 0.16	Very limited Depth to hard bedrock Depth to cemented pan Seepage Slope	1.00 1.00 1.00 1.00
2263: Greyeagle-----	65	Very limited Depth to cemented pan Slope	1.00 0.16	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00
Sanwell-----	15	Very limited Filtering capacity Restricted permeability	1.00 0.50	Very limited Seepage Slope	1.00 0.67
Yermo-----	15	Not limited		Very limited Seepage Slope	1.00 0.67
2266: Greyeagle-----	95	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Slope Seepage	1.00 1.00 1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2267: Greyeagle-----	75	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
Skelon-----	20	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
2268: Greyeagle-----	70	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.91
Arizo-----	25	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.67
2269: Greyeagle-----	45	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
Yermo-----	30	Not limited		Very limited Seepage Slope	1.00 0.01
Strozi-----	20	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
2270: Bluepoint-----	85	Very limited Filtering capacity Slope	1.00 1.00	Very limited Seepage Slope	1.00 1.00
2271: Kawich-----	40	Very limited Filtering capacity	1.00	Very limited Seepage	1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Corbilt-----	25	Somewhat limited Depth to cemented pan	0.47	Very limited Seepage Depth to cemented pan	1.00 0.05
Wanomie-----	20	Very limited Depth to cemented pan Restricted permeability	1.00 0.50	Very limited Depth to cemented pan Seepage	1.00 1.00
2280: Shorim-----	60	Very limited Depth to bedrock Depth to cemented pan Slope	1.00 1.00 0.04	Very limited Depth to hard bedrock Depth to cemented pan Seepage Slope	1.00 1.00 1.00 1.00
Zalda-----	15	Very limited Depth to bedrock Depth to cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to cemented pan Slope	1.00 1.00 1.00
Upspring-----	15	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
2281: Shorim-----	80	Very limited Depth to bedrock Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to hard bedrock Depth to cemented pan Slope Seepage	1.00 1.00 1.00 1.00
Yermo-----	15	Not limited		Very limited Seepage Slope	1.00 0.67
2282: Dedas-----	70	Very limited Depth to bedrock Depth to cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to cemented pan Seepage Slope	1.00 1.00 1.00 1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Orwash-----	20	Very limited Filtering capacity Slope	1.00 0.16	Very limited Seepage Slope	1.00 1.00
2290: Gabbvally-----	40	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 0.50
Upspring-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Rubble Land-----	15	Not rated		Not rated	
2291: Gabbvally-----	70	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope Seepage	1.00 1.00 0.50
Rock Outcrop-----	15	Not rated		Not rated	
2301: Tecopa-----	50	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Haleburu-----	20	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated	
2302: Tecopa-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Rock Outcrop-----	30	Not rated		Not rated	

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Upspring-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
2304: Tecopa-----	50	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Zibate-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Rock Outcrop-----	15	Not rated		Not rated	
2305: Tecopa-----	70	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Rock Outcrop-----	15	Not rated		Not rated	
2310: Nowoy-----	45	Very limited Restricted permeability	1.00	Very limited Seepage	1.00
		Flooding	0.40	Slope	0.67
				Flooding	0.40
Commski-----	40	Somewhat limited Restricted permeability	0.50	Very limited Seepage	1.00
				Slope	0.67
2312: Commski-----	55	Somewhat limited Restricted permeability	0.50	Very limited Seepage	1.00
				Slope	0.09
Tanazza-----	30	Very limited Restricted permeability	1.00	Very limited Seepage	1.00
		Filtering capacity	1.00	Slope	0.67
2320: Wahguyhe-----	40	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Rock Outcrop-----	30	Not rated		Not rated	
Gabbvally-----	20	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
2341: Naye-----	85	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Restricted permeability	0.50	Slope	0.91
				Seepage	0.50
2372: Zalda-----	35	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Slope	1.00	Slope	1.00
Bluepoint-----	35	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Slope	0.04	Slope	1.00
Rock Outcrop-----	20	Not rated		Not rated	
2373: Zalda-----	40	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Slope	1.00	Slope	1.00
Rubble Land-----	25	Not rated		Not rated	
Skelon-----	20	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Slope	0.63	Slope	1.00
				Seepage	1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2381:					
Armpup-----	55	Very limited		Very limited	
		Restricted	1.00	Seepage	1.00
		permeability			
		Filtering	1.00	Slope	0.91
		capacity			
		Depth to bedrock	0.52	Depth to soft bedrock	0.08
Ashmed-----	30	Very limited		Very limited	
		Restricted	1.00	Seepage	1.00
		permeability			
		Filtering	1.00	Slope	0.91
		capacity			
2391:					
Commski-----	65	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted	0.50	Seepage	1.00
		permeability			
Ashmed-----	25	Very limited		Very limited	
		Restricted	1.00	Seepage	1.00
		permeability			
		Filtering	1.00	Slope	1.00
		capacity			
		Slope	0.16		
2392:					
Commski-----	65	Very limited		Very limited	
		Slope	1.00	Slope	1.00
		Restricted	0.50	Seepage	1.00
		permeability			
Ashmed-----	25	Very limited		Very limited	
		Restricted	1.00	Seepage	1.00
		permeability			
		Filtering	1.00	Slope	1.00
		capacity			
		Slope	0.16		
2393:					
Commski-----	70	Somewhat limited		Very limited	
		Restricted	0.50	Seepage	1.00
		permeability			
				Slope	0.09
Yermo-----	25	Not limited		Very limited	
				Seepage	1.00
				Slope	0.09
2400:					
Mobl-----	65	Not limited		Very limited	
				Seepage	1.00
Scottcas-----	20	Very limited		Very limited	
		Filtering	1.00	Seepage	1.00
		capacity			

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2401: Skelon-----	55	Very limited Depth to cemented pan Slope	1.00 0.16	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 1.00
Bacho-----	30	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Slope	1.00 0.91
2421: Orwash-----	50	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.09
Wilst-----	25	Very limited Depth to bedrock Restricted permeability	1.00 0.50	Very limited Depth to hard bedrock Slope Seepage	1.00 0.91 0.50
Agon-----	20	Very limited Depth to bedrock Depth to cemented pan Filtering capacity	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to cemented pan Seepage Slope	1.00 1.00 1.00 0.09
2422: Orwash-----	45	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.09
Louderback-----	25	Very limited Filtering capacity Depth to saturated zone Flooding	1.00 1.00 0.40	Very limited Seepage Depth to saturated zone Flooding Slope	1.00 0.71 0.40 0.09
Arizo-----	15	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2423:					
Orwash-----	40	Very limited Filtering capacity Slope	1.00 0.16	Very limited Seepage Slope	1.00 1.00
Greyeagle-----	30	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
Wanomie-----	20	Very limited Depth to cemented pan Restricted permeability	1.00 0.50	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
2425:					
Orwash-----	45	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Flooding	1.00 0.40
Yermo-----	25	Not limited		Very limited Seepage Slope	1.00 0.09
Arizo-----	20	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage	1.00 1.00
2431:					
Zibate-----	55	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Zyplar-----	15	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 1.00
Dedas-----	15	Very limited Depth to bedrock Depth to cemented pan Slope	1.00 1.00 1.00	Very limited Depth to hard bedrock Depth to cemented pan Seepage Slope	1.00 1.00 1.00 1.00
2432:					
Zibate-----	85	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2434: Cruzspring-----	40	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Depth to soft bedrock	1.00
				Slope	1.00
				Seepage	1.00
Schader-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Restricted permeability	0.50	Seepage	0.50
Rock Outcrop-----	15	Not rated		Not rated	
2436: Zibate-----	70	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Rock Outcrop-----	15	Not rated		Not rated	
2437: Cruzspring-----	70	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Depth to soft bedrock	1.00
				Slope	1.00
				Seepage	1.00
Rock Outcrop-----	15	Not rated		Not rated	
2441: Lewdlac-----	50	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
				Seepage	1.00
				Slope	0.67
Sanwell-----	35	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Restricted permeability	0.50	Slope	0.67

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2451:					
Sanwell-----	40	Very limited Filtering capacity Restricted permeability	1.00 0.50	Very limited Seepage Slope	1.00 0.01
Sanwell-----	25	Very limited Filtering capacity Restricted permeability	1.00 0.50	Very limited Seepage Slope	1.00 0.01
Yermo-----	20	Not limited		Very limited Seepage Slope	1.00 0.01
2461:					
Nowoy-----	60	Very limited Restricted permeability Flooding	1.00 0.40	Very limited Seepage Slope Flooding	1.00 0.67 0.40
Skelon-----	25	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.01
2471:					
Lewdlac-----	70	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
Yermo-----	15	Not limited		Very limited Seepage Slope	1.00 0.09
2481:					
Bacho-----	70	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Slope	1.00 0.91
Greyeagle-----	20	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Slope Seepage	1.00 1.00 1.00
2482:					
Bacho-----	55	Very limited Depth to cemented pan Slope	1.00 0.16	Very limited Depth to cemented pan Slope	1.00 1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Yermo-----	30	Not limited		Very limited Seepage	1.00
				Slope	0.91
2491: Downeyville-----	35	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Blacktop-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.68		
Tokoper-----	20	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Depth to cemented pan	1.00	Depth to cemented pan	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.11	Seepage	0.50
				Content of large stones	0.04
2492: Downeyville-----	40	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Silverbow-----	35	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.70	Content of large stones	0.01
Rock Outcrop-----	15	Not rated		Not rated	
2493: Downeyville-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Tognoni-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.88	Content of large stones	0.89

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Stonell-----	25	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
				Slope	0.67
2494: Downeyville-----	35	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Vindicator-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock	1.00
		Slope	0.04	Slope	1.00
Stewval-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
2495: Downeyville-----	55	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Gabbvally-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
2496: Downeyville-----	40	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Pintwater-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.24	Content of large stones	0.21
Upspring-----	15	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
2500: Commski-----	70	Very limited Slope	1.00	Very limited Seepage	1.00
		Restricted permeability	0.50	Slope	1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Greyeagle-----	20	Very limited Depth to cemented pan Slope	1.00 1.00	Very limited Depth to cemented pan Slope Seepage	1.00 1.00 1.00
2501: Wanomie-----	60	Very limited Depth to cemented pan Restricted permeability	1.00 0.50	Very limited Depth to cemented pan Seepage	1.00 1.00
Corbilt-----	25	Somewhat limited Depth to cemented pan	0.47	Very limited Seepage Depth to cemented pan	1.00 0.05
2510: Fuegosta-----	40	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
Tomel-----	25	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
Izo-----	20	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage	1.00 1.00
2511: Fuegosta-----	45	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
Wardenot-----	30	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Flooding Content of large stones Slope	1.00 0.40 0.01 0.01
Izo-----	20	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.01

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2520: Vigus-----	40	Not limited		Very limited Seepage Slope	1.00 0.01
Fuegosta-----	25	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
Izo-----	25	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.01
2521: Vigus-----	35	Not limited		Very limited Seepage Slope	1.00 0.09
Wardenot-----	30	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Flooding Content of large stones Slope	1.00 0.40 0.01 0.01
Fuegosta-----	25	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
2531: Laxal-----	30	Not limited		Very limited Seepage Slope	1.00 0.67
Stonell-----	30	Very limited Filtering capacity	1.00	Very limited Seepage Slope	1.00 0.67
Unsel-----	25	Very limited Filtering capacity	1.00	Very limited Seepage Slope	1.00 0.67
2532: Laxal-----	50	Not limited		Very limited Seepage Slope	1.00 0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Fang-----	35	Somewhat limited Restricted permeability	0.50	Somewhat limited Seepage	0.50
2540: Lidan-----	65	Very limited Restricted permeability Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Slope	1.00 1.00
Izo-----	20	Very limited Flooding Filtering capacity Slope	1.00 1.00 0.16	Very limited Flooding Seepage Slope	1.00 1.00 1.00
2550: Stonewall-----	60	Very limited Filtering capacity Slope	1.00 0.63	Very limited Slope Seepage	1.00 1.00
Izo-----	15	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.91
Lidan-----	15	Very limited Restricted permeability Depth to cemented pan Slope	1.00 1.00 0.63	Very limited Depth to cemented pan Slope	1.00 1.00
2570: Stargo-----	70	Very limited Flooding	1.00	Very limited Flooding Seepage	1.00 1.00
Playas-----	20	Not rated		Not rated	
2580: Wardenot-----	50	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Slope Flooding Content of large stones	1.00 0.67 0.40 0.01

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Izo-----	35	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.09
2601: Cobatus-----	65	Very limited Depth to saturated zone Restricted permeability	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.50
Kawich-----	25	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
2611: Corbilt-----	85	Somewhat limited Depth to cemented pan	0.47	Very limited Seepage Slope Depth to cemented pan	1.00 0.33 0.05
2630: Wechech-----	55	Very limited Depth to cemented pan Slope	1.00 0.04	Very limited Depth to cemented pan Slope	1.00 1.00
Commski-----	40	Somewhat limited Restricted permeability Slope	0.50 0.04	Very limited Seepage Slope	1.00 1.00
2640: Downeyville-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Advokay-----	35	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to soft bedrock Slope	1.00 1.00
Pintwater-----	15	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.24	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.21

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2641: Advokay-----	35	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock	1.00
		Slope	0.63	Slope	1.00
Ardivay-----	30	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Content of large stones	0.02	Slope	0.67
				Content of large stones	0.03
Leo-----	20	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
				Slope	0.67
2642: Advokay-----	65	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock	1.00
		Slope	0.16	Slope	1.00
Blacktop-----	20	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.68		
2650: Luning-----	40	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Flooding	0.40	Flooding	0.40
Wardenot-----	30	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Flooding	0.40	Flooding	0.40
				Content of large stones	0.01
Izo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00
		Filtering capacity	1.00	Seepage	1.00
2660: Stonell-----	35	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
				Slope	0.67

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Wardenot-----	30	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Slope Flooding Content of large stones	1.00 0.67 0.40 0.01
Izo-----	20	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.01
2670: Ardivey-----	65	Very limited Filtering capacity Content of large stones	1.00 0.02	Very limited Seepage Slope Content of large stones	1.00 0.67 0.03
Izo-----	20	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.09
2671: Ardivey-----	45	Very limited Filtering capacity Content of large stones	1.00 0.02	Very limited Seepage Slope Content of large stones	1.00 0.09 0.03
Stonell-----	20	Very limited Filtering capacity	1.00	Very limited Seepage Slope	1.00 0.09
Izo-----	20	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.01
2680: Espint-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to soft bedrock Slope	1.00 1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Vindicator-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
Espint-----	20	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock	1.00
		Slope	0.04	Slope	1.00
2681: Espint-----	40	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
Stewval-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Vindicator-----	15	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
2682: Espint-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock	1.00
		Slope	1.00	Slope	1.00
Gabbvally-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Stewval-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
2690: Leo-----	55	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
				Slope	0.09
Izo-----	35	Very limited Flooding	1.00	Very limited Flooding	1.00
		Filtering capacity	1.00	Seepage	1.00
				Slope	0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2701: Cobatus-----	90	Very limited Depth to saturated zone Restricted permeability	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.50
2710: Papoose-----	35	Very limited Filtering capacity Restricted permeability	1.00 0.50	Very limited Seepage Slope	1.00 0.67
Vindicator-----	35	Very limited Depth to bedrock Slope	1.00 0.04	Very limited Depth to soft bedrock Slope	1.00 1.00
Espint-----	15	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock Slope	1.00 0.09
2720: Unsel-----	40	Very limited Filtering capacity	1.00	Very limited Seepage Slope	1.00 0.67
Stonell-----	30	Very limited Filtering capacity	1.00	Very limited Seepage Slope	1.00 0.67
Veet-----	20	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Slope Flooding	1.00 0.67 0.40
2730: Gabbvally-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Blacktop-----	30	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Depth to hard bedrock Slope	1.00 1.00
Espint-----	20	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to soft bedrock Slope	1.00 1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2731:					
Gabbvally-----	35	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Downeyville-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Vindicator-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to soft bedrock	1.00
		Slope	0.04	Slope	1.00
2732:					
Gabbvally-----	40	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Tognoni-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.31	Content of large stones	0.23
Downeyville-----	20	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
2734:					
Gabbvally-----	70	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Downeyville-----	20	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
2735:					
Gabbvally-----	45	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Wahguyhe-----	25	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Rock Outcrop-----	15	Not rated		Not rated	
2736: Gabbvally-----	35	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Brier-----	35	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.65	Content of large stones	0.88
Rock Outcrop-----	15	Not rated		Not rated	
2740: Tognoni-----	65	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.31	Content of large stones	0.23
Blacktop-----	20	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
2741: Blacktop-----	50	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.68		
Downeyville-----	20	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
Tognoni-----	20	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Content of large stones	0.88	Content of large stones	0.89

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2750: Silverbow-----	50	Very limited Depth to cemented pan Content of large stones	1.00 0.70	Very limited Depth to cemented pan Slope Content of large stones	1.00 0.67 0.01
Wardenot-----	20	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Slope Flooding Content of large stones	1.00 0.67 0.40 0.01
Izo-----	15	Very limited Flooding Filtering capacity	1.00 1.00	Very limited Flooding Seepage Slope	1.00 1.00 0.09
2760: Downeyville-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Depth to hard bedrock Slope	1.00 1.00
Unsel-----	30	Very limited Filtering capacity Slope	1.00 0.16	Very limited Seepage Slope	1.00 1.00
Tokoper-----	20	Very limited Depth to bedrock Depth to cemented pan Slope Content of large stones	1.00 1.00 0.16 0.11	Very limited Depth to hard bedrock Depth to cemented pan Slope Seepage Content of large stones	1.00 1.00 1.00 0.50 0.04
2770: Bullfor-----	50	Very limited Depth to cemented pan Filtering capacity	1.00 1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
Panor-----	30	Very limited Restricted permeability	1.00	Somewhat limited Slope	0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Bluepoint-----	15	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Slope	0.16	Slope	1.00
2781: Haymont-----	50	Somewhat limited Restricted permeability	0.50	Somewhat limited Seepage	0.50
				Slope	0.09
Bluepoint-----	20	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
				Slope	0.01
Panor-----	15	Very limited Restricted permeability	1.00	Somewhat limited Slope	0.09
2810: Ashmed, moist-----	50	Very limited Restricted permeability	1.00	Very limited Seepage	1.00
		Filtering capacity	1.00	Slope	0.09
Yermo-----	20	Not limited		Very limited Seepage	1.00
				Slope	0.09
Niavi-----	15	Very limited Flooding	1.00	Very limited Flooding	1.00
		Filtering capacity	1.00	Seepage	1.00
		Content of large stones	0.01	Content of large stones	0.38
				Slope	0.33
2820: Strozi-----	60	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
				Seepage	1.00
Corbilt-----	30	Somewhat limited Depth to cemented pan	0.47	Very limited Seepage	1.00
				Depth to cemented pan	0.05

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2840: Armpup-----	60	Very limited Restricted permeability Filtering capacity Depth to bedrock	1.00 1.00 0.52	Very limited Seepage Slope Depth to soft bedrock	1.00 0.09 0.08
Strozi-----	35	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
2850: Scottcas-----	50	Very limited Filtering capacity	1.00	Very limited Seepage Slope	1.00 0.91
Yermo-----	35	Not limited		Very limited Seepage Slope	1.00 0.91
2860: Sezna-----	50	Very limited Depth to cemented pan Content of large stones	1.00 0.18	Very limited Depth to cemented pan Content of large stones Slope	1.00 0.76 0.67
Yermo-----	35	Not limited		Very limited Seepage Slope	1.00 0.09
2870: Kanackey-----	85	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.94	Very limited Depth to hard bedrock Slope Content of large stones	1.00 1.00 0.96
2880: Bacho-----	45	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Slope	1.00 0.67
Yermo-----	25	Not limited		Very limited Seepage Slope	1.00 0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Arizo-----	15	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
		Flooding	0.40	Flooding Slope	0.40 0.09
2890: Nopah-----	35	Very limited Restricted permeability	1.00	Somewhat limited Slope	0.91
Woda-----	30	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
		Slope	0.04	Slope	1.00
Gullied Land-----	20	Not rated		Not rated	
2900: Playas-----	100	Not rated		Not rated	
2901: Playas-----	40	Not rated		Not rated	
Corbilt-----	30	Somewhat limited Depth to cemented pan	0.47	Very limited Seepage	1.00
				Depth to cemented pan	0.05
Bluepoint-----	20	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
				Slope	0.01
2903: Playas-----	45	Not rated		Not rated	
Mobl-----	30	Not limited		Very limited Seepage	1.00
Kawich-----	15	Very limited Filtering capacity	1.00	Very limited Seepage	1.00
				Slope	0.01
2910: Dune Land-----	100	Not rated		Not rated	

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2920: Dumps-----	100	Not rated		Not rated	
2930: Seralin-----	55	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
				Seepage	0.50
Rock Outcrop-----	15	Not rated		Not rated	
Sed-----	15	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
2940: Schader-----	40	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Slope	1.00
		Restricted permeability	0.50	Seepage	0.50
Sed-----	30	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Restricted permeability	1.00	Slope	1.00
		Slope	1.00		
Cruzspring-----	15	Very limited Depth to bedrock	1.00	Very limited Depth to hard bedrock	1.00
		Slope	1.00	Depth to soft bedrock	1.00
				Slope	1.00
				Seepage	1.00
2950: Pits-----	100	Not rated		Not rated	
2951: Pits-----	100	Not rated		Not rated	
2960: Tomel-----	35	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan	1.00
				Seepage	1.00
				Slope	0.09

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Ardivey-----	30	Very limited Filtering capacity Content of large stones	1.00 0.02	Very limited Seepage Slope Content of large stones	1.00 0.67 0.03
Wardenot-----	20	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Slope Flooding Content of large stones	1.00 0.67 0.40 0.01
2961: Tomel-----	55	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.67
Breko-----	15	Very limited Restricted permeability Filtering capacity	1.00 1.00	Very limited Seepage Slope	1.00 0.67
Wardenot-----	15	Very limited Filtering capacity Flooding	1.00 0.40	Very limited Seepage Slope Flooding Content of large stones	1.00 0.67 0.40 0.01
2970: Destazo-----	40	Very limited Restricted permeability	1.00	Somewhat limited Slope	0.09
Nowoy-----	30	Very limited Restricted permeability Flooding	1.00 0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.09
Gullied Land-----	20	Not rated		Not rated	
2971: Upspring-----	85	Very limited Depth to bedrock Slope	1.00 0.63	Very limited Depth to hard bedrock Slope	1.00 1.00

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
2990: Lealandic-----	60	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Slope	1.00 0.09
Ashmed-----	30	Very limited Restricted permeability Filtering capacity	1.00 1.00	Very limited Seepage Slope	1.00 0.09
3021: Casaga-----	45	Very limited Restricted permeability	1.00	Very limited Seepage Slope	1.00 0.09
Destazo-----	25	Very limited Restricted permeability	1.00	Somewhat limited Slope	0.67
Yurm-----	20	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.09
3022: Casaga-----	40	Very limited Restricted permeability Flooding	1.00 0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.09
Woda-----	35	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Slope	1.00 0.09
Yermo-----	20	Somewhat limited Flooding	0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.09
3052: Bohnbob-----	65	Very limited Restricted permeability Depth to saturated zone Flooding	1.00 0.84 0.40	Somewhat limited Seepage Flooding Depth to saturated zone Slope	0.50 0.40 0.17 0.01

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Caslo-----	20	Very limited Flooding Restricted permeability Depth to saturated zone	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00
3101: Bluepoint-----	45	Very limited Filtering capacity Slope	1.00 0.16	Very limited Seepage Slope	1.00 1.00
Besherm-----	40	Very limited Restricted permeability	1.00	Somewhat limited Slope	0.09
3120: Nowoy-----	45	Very limited Restricted permeability Flooding	1.00 0.40	Very limited Seepage Slope Flooding	1.00 0.67 0.40
Tanazza-----	25	Very limited Restricted permeability Filtering capacity	1.00 1.00	Very limited Seepage Slope	1.00 0.01
Yurm-----	20	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.01
3150: Casaga-----	85	Very limited Restricted permeability	1.00	Very limited Seepage Slope	1.00 0.09
3230: Alko-----	60	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage	1.00 1.00
Casaga-----	30	Very limited Restricted permeability Flooding	1.00 0.40	Very limited Seepage Flooding	1.00 0.40

TABLE 9a.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
3252: Bobnbob-----	70	Very limited Flooding Restricted permeability Depth to saturated zone	1.00 1.00 1.00	Very limited Flooding Depth to saturated zone Seepage	1.00 1.00 0.50
Cobatus-----	15	Very limited Depth to saturated zone Restricted permeability	1.00 1.00	Very limited Depth to saturated zone Seepage	1.00 0.50
3302: Rumpah-----	90	Very limited Restricted permeability	1.00	Not limited	
3313: Besherm-----	85	Very limited Restricted permeability	1.00	Not limited	
3320: Haymont-----	85	Somewhat limited Restricted permeability	0.50	Somewhat limited Seepage	0.50
3333: Nopah-----	85	Very limited Restricted permeability	1.00	Not limited	
4010: Tanazza-----	35	Very limited Restricted permeability Filtering capacity	1.00 1.00	Very limited Seepage Slope	1.00 0.67
Wechech-----	35	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.67
Wodavar-----	15	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Seepage Slope	1.00 1.00 0.67
4030: Wechech-----	45	Very limited Depth to cemented pan	1.00	Very limited Depth to cemented pan Slope	1.00 0.01

TABLE 9a.--SANITARY FACILITIES

Map symbol and soil name	Pct. of map unit	Septic tank absorption fields		Sewage lagoons	
		Rating class and limiting features	Value	Rating class and limiting features	Value
Nopah-----	20	Very limited Restricted permeability	1.00	Somewhat limited Slope	0.01
Yermo-----	20	Not limited		Very limited Seepage Slope	1.00 0.01
4060: Besherm-----	70	Very limited Restricted permeability	1.00	Not limited	
Tanazza-----	15	Very limited Restricted permeability Filtering capacity	1.00 1.00	Very limited Seepage	1.00
4070: Gynelle-----	35	Very limited Filtering capacity Flooding Content of large stones	1.00 0.40 0.01	Very limited Seepage Flooding Content of large stones Slope	1.00 0.40 0.17 0.01
Kawich-----	25	Very limited Filtering capacity Slope	1.00 1.00	Very limited Slope Seepage	1.00 1.00
Cirac-----	25	Somewhat limited Flooding	0.40	Very limited Seepage Flooding Slope	1.00 0.40 0.01
4071: Corbilt-----	85	Not limited		Very limited Seepage Slope	1.00 0.01
4080: Water-----	100	Not rated		Not rated	

TABLE 9b.--SANITARY FACILITIES

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the limitation. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1314: Weiser-----	70	Not limited		Not limited		Very limited Gravel content Carbonate content Seepage	1.00 1.00 0.50
Wechech-----	15	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
1315: Lastchance-----	40	Very limited Depth to thick cemented pan Slope	1.00 0.01	Somewhat limited Slope	0.01	Very limited Depth to cemented pan Gravel content Slope	1.00 1.00 0.01
Lastchance, upper elevation fans-----	30	Very limited Depth to thick cemented pan Slope	1.00 0.01	Somewhat limited Slope	0.01	Very limited Depth to cemented pan Gravel content Slope	1.00 1.00 0.01
Commski-----	15	Not limited		Not limited		Very limited Gravel content	1.00
1316: Lastchance-----	40	Very limited Depth to thick cemented pan Slope	1.00 0.01	Somewhat limited Slope	0.01	Very limited Depth to cemented pan Gravel content Slope	1.00 1.00 0.01
Ferrogold-----	30	Very limited Depth to thick cemented pan Slope	1.00 0.01	Somewhat limited Slope	0.01	Very limited Depth to cemented pan Gravel content Slope	1.00 1.00 0.01
Commski-----	15	Not limited		Not limited		Very limited Gravel content	1.00
1317: Commski-----	70	Not limited		Not limited		Very limited Gravel content	1.00

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Lastchance-----	15	Very limited Depth to thick cemented pan	1.00	Not limited		Very limited Depth to cemented pan Gravel content	1.00 1.00
1320: Boxspring-----	50	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Zeheme-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.96 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
1321: Boxspring-----	40	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Seralin-----	30	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 0.87
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
1340: Longjim-----	70	Somewhat limited Depth to thin cemented pan Slope	0.50 0.16	Somewhat limited Slope	0.16	Very limited Depth to cemented pan Gravel content Seepage Slope	1.00 1.00 0.50 0.16
Niavi-----	15	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding	1.00	Very limited Seepage Gravel content Content of large stones	1.00 1.00 0.01
1871: Irongold-----	45	Not limited		Not limited		Very limited Depth to cemented pan Gravel content	1.00 0.64

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Irongold-----	25	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Depth to cemented pan Gravel content Slope	1.00 0.64 0.63
Weiser-----	15	Not limited		Not limited		Very limited Gravel content Seepage	1.00 0.50
2002: Rock Outcrop-----	45	Not rated		Not rated		Not rated	
Upspring-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Gravel content Slope Seepage	1.00 1.00 1.00 0.50
Rubble Land-----	15	Not rated		Not rated		Not rated	
2004: Rock Outcrop-----	55	Not rated		Not rated		Not rated	
Zyplar-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 0.05
2005: Rock Outcrop-----	50	Not rated		Not rated		Not rated	
St. Thomas-----	20	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Content of large stones Seepage	1.00 1.00 0.61 0.58 0.50
St. Thomas-----	15	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.56	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Content of large stones Seepage	1.00 1.00 0.72 0.56 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2010: Longjim-----	90	Somewhat limited Depth to thin cemented pan Slope	0.50 0.16	Somewhat limited Slope	0.16	Very limited Depth to cemented pan Gravel content Seepage Slope	1.00 1.00 0.50 0.16
2011: Sanwell-----	45	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Sanwell-----	40	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
2012: Zalda-----	45	Very limited Depth to bedrock Depth to thin cemented pan	1.00 0.50	Not limited		Very limited Depth to cemented pan Depth to bedrock Too acid Seepage Gravel content	1.00 1.00 1.00 1.00 0.50 0.01
Greyeagle-----	30	Very limited Slope Too Sandy Depth to thin cemented pan	1.00 1.00 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Slope Gravel content Seepage Too Sandy	1.00 1.00 1.00 1.00 1.00 0.50
Upspring-----	15	Very limited Depth to bedrock Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Depth to bedrock Gravel content Slope Seepage	1.00 1.00 0.63 0.50
2013: Longjim-----	45	Somewhat limited Depth to thin cemented pan Slope	0.50 0.16	Somewhat limited Slope	0.16	Very limited Depth to cemented pan Gravel content Seepage Slope	1.00 1.00 0.50 0.16
Yurm-----	40	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Depth to cemented pan Gravel content Seepage Slope	1.00 1.00 0.50 0.16

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2020: Weiser-----	70	Not limited		Not limited		Very limited Gravel content Carbonate content Seepage	1.00 1.00 0.50
Canoto-----	25	Not limited		Not limited		Very limited Gravel content Seepage	1.00 0.50
2021: Weiser-----	70	Not limited		Not limited		Very limited Gravel content Carbonate content Seepage	1.00 1.00 0.50
Nickel-----	25	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Very limited Gravel content Seepage Slope	1.00 0.50 0.16
2023: Commski-----	35	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Gravel content Slope	1.00 1.00
Commski-----	30	Not limited		Not limited		Very limited Gravel content	1.00
Sezna-----	20	Somewhat limited Depth to thin cemented pan Content of large stones	0.50 0.18	Not limited		Very limited Depth to cemented pan Content of large stones Gravel content	1.00 0.18 0.06
2030: Corbilt-----	85	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Somewhat limited Seepage Gravel content Depth to cemented pan	0.50 0.37 0.05
2031: Corbilt-----	60	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Somewhat limited Seepage Gravel content Depth to cemented pan	0.50 0.37 0.05
Skelon-----	35	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

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TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Greyeagle-----	20	Very limited Too Sandy	1.00	Somewhat limited Slope	0.63	Very limited Depth to cemented pan	1.00
		Slope	0.63			Gravel content	1.00
		Depth to thin cemented pan	0.50			Seepage	1.00
						Slope	0.63
						Too Sandy	0.50
Arizo-----	15	Very limited Too Sandy	1.00	Somewhat limited Flooding	0.40	Very limited Too Sandy	1.00
		Flooding	0.40	Slope	0.16	Seepage	1.00
		Slope	0.16			Gravel content	0.96
		Content of large stones	0.01			Slope	0.16
						Content of large stones	0.01
2054: Yermo, hot-----	40	Not limited		Not limited		Somewhat limited Gravel content	0.98
						Seepage	0.50
Yermo-----	30	Not limited		Not limited		Somewhat limited Gravel content	0.98
						Seepage	0.50
Arizo-----	15	Very limited Too Sandy	1.00	Somewhat limited Flooding	0.40	Very limited Too Sandy	1.00
		Flooding	0.40			Seepage	1.00
						Gravel content	1.00
2055: Canoto-----	60	Not limited		Not limited		Very limited Gravel content	1.00
						Seepage	0.50
Canoto, MOIST-----	25	Not limited		Not limited		Very limited Gravel content	1.00
						Seepage	0.50
2057: Yermo-----	50	Not limited		Not limited		Somewhat limited Gravel content	0.98
						Seepage	0.50
Commski-----	40	Not limited		Not limited		Very limited Gravel content	1.00
2058: Canoto-----	50	Not limited		Not limited		Very limited Gravel content	1.00
						Seepage	0.50
Nickel-----	40	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Gravel content	1.00
						Seepage	0.50
						Slope	0.04

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2060: Purob-----	60	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Carbonate content	1.00 1.00 1.00
Irongold-----	25	Not limited		Not limited		Very limited Depth to cemented pan Gravel content	1.00 0.64
2061: Vace-----	95	Very limited Slope Depth to thin cemented pan	1.00 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Slope Gravel content	1.00 1.00 0.14
2062: Purob-----	75	Very limited Slope Depth to thin cemented pan	1.00 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Slope Carbonate content Seepage Gravel content	1.00 1.00 1.00 0.50 0.50
Niavi-----	10	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding	1.00	Very limited Seepage Gravel content Content of large stones	1.00 1.00 0.01
2064: Longjim, summer precip.-----	55	Somewhat limited Depth to thin cemented pan Slope	0.50 0.16	Somewhat limited Slope	0.16	Very limited Depth to cemented pan Gravel content Seepage Slope	1.00 1.00 0.50 0.16
Purob-----	20	Somewhat limited Depth to thin cemented pan Slope	0.50 0.04	Somewhat limited Slope	0.04	Very limited Depth to cemented pan Carbonate content Seepage Gravel content Slope	1.00 1.00 0.50 0.50 0.04

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Niavi-----	10	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding	1.00	Very limited Seepage Gravel content Content of large stones	1.00 1.00 0.01
2070: Shamock-----	90	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Seepage Gravel content	1.00 0.50 0.50
2071: Shamock-----	45	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Seepage Gravel content	1.00 0.50 0.50
Skelon-----	40	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
2080: St. Thomas-----	35	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.58	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Content of large stones Seepage	1.00 1.00 0.61 0.58 0.50
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Commski-----	20	Somewhat limited Slope	0.63	Somewhat limited Slope	0.63	Very limited Gravel content Slope	1.00 0.63
2081: St. Thomas-----	45	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.58	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Content of large stones Seepage	1.00 1.00 0.61 0.58 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Tecopa-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2090: Breko-----	55	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Veet-----	35	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Seepage Gravel content	1.00 1.00
2110: Pahrump-----	90	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Somewhat limited Gravel content Slope	0.31 0.16
2121: Commski-----	60	Not limited		Not limited		Very limited Gravel content	1.00
Arizo-----	30	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00
2131: Upspring-----	55	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Gravel content Slope Seepage	1.00 1.00 1.00 0.50
Shorim-----	20	Very limited Depth to bedrock Slope Depth to thin cemented pan	1.00 1.00 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 1.00 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2140: Jonnic-----	75	Somewhat limited Depth to thin cemented pan Content of large stones	0.50 0.03	Not limited		Very limited Depth to cemented pan Gravel content Content of large stones	1.00 0.85 0.03
Niavi-----	10	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding	1.00	Very limited Seepage Gravel content Content of large stones	1.00 1.00 0.01
2151: Arizo-----	40	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00
Bluepoint-----	35	Very limited Too Sandy	1.00	Not limited		Very limited Too Sandy Seepage	1.00 1.00
Dune Land-----	15	Not rated		Not rated		Not rated	
2152: Arizo-----	85	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00
2153: Arizo-----	35	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00
Corbilt-----	25	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Somewhat limited Gravel content Seepage Depth to cemented pan	0.51 0.50 0.42
Commski-----	25	Not limited		Not limited		Very limited Gravel content	1.00
2161: Casaga-----	55	Very limited Salinity Flooding	1.00 0.40	Somewhat limited Flooding	0.40	Somewhat limited Gravel content	0.68

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Nowoy-----	30	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Carbonate content	1.00
2162: Casaga-----	40	Not limited		Not limited		Somewhat limited Gravel content	0.99
Panor-----	25	Very limited Salinity	1.00	Not limited		Not limited	
Yermo-----	20	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
2171: Sanwell-----	60	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Skelon-----	30	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
2172: Sanwell-----	60	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Yermo-----	35	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
2181: Skelon-----	30	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
Yermo-----	30	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
Pinez-----	25	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Gravel content Depth to cemented pan	1.00 0.99
2184: Skelon-----	60	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Bullfor-----	25	Very limited Too Sandy	1.00	Not limited		Very limited Depth to cemented pan	1.00
		Depth to thin cemented pan	0.50			Seepage	1.00
						Too Sandy	0.50
2185: Skelon-----	50	Somewhat limited Depth to thin cemented pan	0.50	Somewhat limited Slope	0.16	Very limited Depth to cemented pan	1.00
		Slope	0.16			Gravel content	1.00
						Seepage	0.50
						Slope	0.16
Yermo-----	30	Somewhat limited Slope	0.16	Somewhat limited Slope	0.16	Somewhat limited Gravel content	0.98
						Seepage	0.50
						Slope	0.16
Ashmed-----	15	Very limited Salinity	1.00	Not limited		Very limited Seepage	1.00
						Gravel content	1.00
2186: Yermo-----	35	Not limited		Not limited		Somewhat limited Gravel content	0.98
						Seepage	0.50
Skelon-----	35	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan	1.00
						Gravel content	1.00
						Seepage	0.50
Pinez-----	15	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Gravel content	1.00
						Depth to cemented pan	0.99
2191: Pinez-----	40	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Gravel content	1.00
						Depth to cemented pan	0.99
Lealandic-----	35	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan	1.00
						Gravel content	1.00
Arizo-----	20	Very limited Too Sandy Flooding	1.00 0.40	Somewhat limited Flooding	0.40	Very limited Too Sandy Seepage	1.00 1.00
						Gravel content	1.00

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2201: Corbilt-----	65	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Somewhat limited Gravel content	0.50
						Seepage	0.50
						Depth to cemented pan	0.05
Arizo-----	30	Very limited Too Sandy Flooding	1.00 0.40	Somewhat limited Flooding	0.40	Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00
2202: Corbilt-----	50	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Somewhat limited Seepage	0.50
						Gravel content	0.37
						Depth to cemented pan	0.05
Migern-----	25	Very limited Too Sandy	1.00	Not limited		Very limited Seepage Too Sandy Gravel content	1.00 0.50 0.48
Arizo-----	20	Very limited Too Sandy Flooding	1.00 0.40	Somewhat limited Flooding	0.40	Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00
2204: Corbilt-----	40	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Somewhat limited Seepage	0.50
						Gravel content	0.37
						Depth to cemented pan	0.05
Wodavar-----	25	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
Sanwell-----	25	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
2212: Yermo-----	70	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Bullfor-----	20	Very limited Too Sandy	1.00	Not limited		Very limited Depth to cemented pan	1.00
		Depth to thin cemented pan	0.50			Seepage	1.00
						Too Sandy	0.50
2214: Yermo-----	65	Not limited		Not limited		Somewhat limited Gravel content	0.98
						Seepage	0.50
Arizo-----	30	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
						Gravel content	1.00
2215: Yermo-----	60	Not limited		Not limited		Somewhat limited Gravel content	0.98
						Seepage	0.50
Greyeagle-----	25	Very limited Too Sandy	1.00	Not limited		Very limited Depth to cemented pan	1.00
		Depth to thin cemented pan	0.50			Gravel content	1.00
						Seepage	1.00
						Too Sandy	0.50
2216: Yermo-----	65	Not limited		Not limited		Somewhat limited Gravel content	0.98
						Seepage	0.50
Arizo-----	20	Very limited Too Sandy	1.00	Somewhat limited Flooding	0.40	Very limited Too Sandy	1.00
		Flooding	0.40			Seepage	1.00
						Gravel content	1.00
2218: Sanwell-----	50	Not limited		Not limited		Very limited Seepage	1.00
						Gravel content	1.00
Commski-----	45	Not limited		Not limited		Very limited Gravel content	1.00
2220: Canoto-----	65	Not limited		Not limited		Very limited Gravel content	1.00
						Seepage	0.50
Arizo-----	20	Very limited Flooding	1.00	Very limited Flooding	1.00	Very limited Too Sandy	1.00
		Too Sandy	1.00			Seepage	1.00
						Gravel content	1.00

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2221: Sanwell-----	60	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Greyeagle-----	30	Very limited Too Sandy Depth to thin cemented pan	1.00 0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage Too Sandy	1.00 1.00 1.00 1.00 0.50
2222: Niavi-----	55	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding	1.00	Very limited Seepage Gravel content Content of large stones	1.00 1.00 1.00 0.01
Jonnice-----	35	Somewhat limited Depth to thin cemented pan Content of large stones	0.50 0.03	Not limited		Very limited Depth to cemented pan Gravel content Content of large stones	1.00 0.85 0.03
2230: Yermo-----	60	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
Skelon-----	25	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
2233: Yermo-----	35	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
Skelon-----	25	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
Bluepoint-----	25	Very limited Too Sandy Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Too Sandy Seepage Slope	1.00 1.00 0.63

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2250: Tokoper-----	40	Very limited Depth to bedrock Slope Depth to thin cemented pan Content of large stones	1.00 0.63 0.50 0.11	Somewhat limited Slope	0.63	Very limited Depth to cemented pan Depth to bedrock Slope Gravel content Content of large stones	1.00 1.00 0.63 0.61 0.11
Upspring-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2251: Tokoper-----	35	Very limited Depth to bedrock Slope Depth to thin cemented pan Content of large stones	1.00 0.63 0.50 0.11	Somewhat limited Slope	0.63	Very limited Depth to cemented pan Depth to bedrock Slope Gravel content Content of large stones	1.00 1.00 0.63 0.61 0.11
Downeyville-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
Pintwater-----	20	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Seepage Gravel content	1.00 1.00 0.68 0.50 0.21
2252: Tokoper-----	55	Very limited Depth to bedrock Slope Depth to thin cemented pan Content of large stones	1.00 0.63 0.50 0.11	Somewhat limited Slope	0.63	Very limited Depth to cemented pan Depth to bedrock Slope Gravel content Content of large stones	1.00 1.00 0.63 0.61 0.11

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Blacktop-----	30	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Gravel content	1.00 1.00 0.68 0.20
2253: Tokoper-----	60	Very limited Depth to bedrock Depth to thin cemented pan Slope Content of large stones	1.00 0.50 0.16 0.11	Somewhat limited Slope	0.16	Very limited Depth to cemented pan Depth to bedrock Gravel content Slope Content of large stones	1.00 1.00 0.61 0.16 0.11
Ardivey-----	25	Very limited Too Sandy Content of large stones	1.00 0.06	Not limited		Very limited Seepage Gravel content Too Sandy Content of large stones	1.00 1.00 0.50 0.06
2254: Tokoper-----	35	Very limited Depth to bedrock Slope Depth to thin cemented pan Content of large stones	1.00 1.00 0.50 0.11	Very limited Slope	1.00	Very limited Depth to cemented pan Depth to bedrock Slope Gravel content Content of large stones	1.00 1.00 1.00 0.61 0.11
Downeyville-----	30	Very limited Depth to bedrock Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Depth to bedrock Gravel content Slope Seepage	1.00 0.99 0.63 0.50
Espint-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Seepage Gravel content	1.00 1.00 0.50 0.20

TABLE 9b.--SANITARY FACILITIES--Continued

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TABLE 9b.--SANITARY FACILITIES--Continued

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TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2270: Bluepoint-----	85	Very limited Too Sandy Slope	1.00 1.00	Very limited Slope	1.00	Very limited Too Sandy Slope Seepage	1.00 1.00 0.50
2271: Kawich-----	40	Very limited Too Sandy	1.00	Not limited		Very limited Too Sandy Seepage	1.00 1.00
Corbilt-----	25	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Somewhat limited Seepage Gravel content Depth to cemented pan	0.50 0.37 0.05
Wanomie-----	20	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan	1.00
2280: Shorim-----	60	Very limited Depth to bedrock Depth to thin cemented pan Slope	1.00 0.50 0.04	Somewhat limited Slope	0.04	Very limited Depth to cemented pan Depth to bedrock Gravel content Seepage Slope	1.00 1.00 1.00 0.50 0.04
Zalda-----	15	Very limited Depth to bedrock Slope Depth to thin cemented pan	1.00 1.00 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Depth to bedrock Slope Too acid Seepage	1.00 1.00 1.00 1.00 0.50
Upspring-----	15	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
2281: Shorim-----	80	Very limited Depth to bedrock Slope Depth to thin cemented pan	1.00 0.63 0.50	Somewhat limited Slope	0.63	Very limited Depth to cemented pan Depth to bedrock Gravel content Slope Seepage	1.00 1.00 1.00 0.63 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Yermo-----	15	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
2282: Dedas-----	70	Very limited Depth to bedrock Slope Depth to thin cemented pan	1.00 1.00 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Depth to bedrock Gravel content Slope Seepage	1.00 1.00 1.00 1.00 1.00 0.50
Orwash-----	20	Very limited Too Sandy Slope	1.00 0.16	Somewhat limited Slope	0.16	Very limited Too Sandy Seepage Gravel content Slope	1.00 1.00 0.67 0.16
2290: Gabbvally-----	40	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Upspring-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
Rubble Land-----	15	Not rated		Not rated		Not rated	
2291: Gabbvally-----	70	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2301: Tecopa-----	50	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Haleburu-----	20	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Gravel content Slope Seepage	1.00 1.00 1.00 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2302: Tecopa-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Upspring-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Gravel content Slope Too acid Seepage	1.00 1.00 1.00 1.00 0.50
2304: Tecopa-----	50	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
Zibate-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Gravel content Slope	1.00 1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2305: Tecopa-----	70	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2310: Nowoy-----	45	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Carbonate content	1.00
Commski-----	40	Not limited		Not limited		Very limited Gravel content	1.00

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2312: Commski-----	55	Not limited		Not limited		Very limited Gravel content	1.00
Tanazza-----	30	Not limited		Not limited		Very limited Carbonate content	1.00
2320: Wahguyhe-----	40	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Gabbvally-----	20	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
2341: Naye-----	85	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content	1.00 1.00
2372: Zalda-----	35	Very limited Depth to bedrock Slope Depth to thin cemented pan	1.00 1.00 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Depth to bedrock Slope Too acid Seepage	1.00 1.00 1.00 1.00 0.50
Bluepoint-----	35	Very limited Too Sandy Slope	1.00 0.04	Somewhat limited Slope	0.04	Very limited Too Sandy Seepage Slope	1.00 1.00 0.04
Rock Outcrop-----	20	Not rated		Not rated		Not rated	
2373: Zalda-----	40	Very limited Depth to bedrock Slope Depth to thin cemented pan	1.00 1.00 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Depth to bedrock Slope Too acid Seepage	1.00 1.00 1.00 1.00 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

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TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Scottcas-----	20	Very limited Too Sandy	1.00	Not limited		Very limited Seepage Gravel content Too Sandy	1.00 1.00 0.50
2401: Skelon-----	55	Somewhat limited Depth to thin cemented pan Slope	0.50 0.16	Somewhat limited Slope	0.16	Very limited Depth to cemented pan Gravel content Seepage Slope	1.00 1.00 0.50 0.16
Bacho-----	30	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content	1.00 1.00
2421: Orwash-----	50	Very limited Too Sandy Flooding	1.00 0.40	Somewhat limited Flooding	0.40	Very limited Too Sandy Seepage Gravel content	1.00 1.00 0.67
Wilst-----	25	Very limited Depth to bedrock	1.00	Not limited		Very limited Depth to bedrock Gravel content	1.00 1.00
Agon-----	20	Very limited Depth to bedrock Too Sandy Depth to thin cemented pan	1.00 1.00 0.50	Not limited		Very limited Depth to cemented pan Depth to bedrock Seepage Gravel content Too Sandy	1.00 1.00 1.00 0.65 0.50
2422: Orwash-----	45	Very limited Too Sandy Flooding	1.00 0.40	Somewhat limited Flooding	0.40	Very limited Too Sandy Seepage Gravel content	1.00 1.00 0.67
Louderback-----	25	Very limited Depth to saturated zone Too Sandy Salinity Flooding	1.00 1.00 1.00 0.40	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Too Sandy Seepage	1.00 1.00
Arizo-----	15	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2423: Orwash-----	40	Very limited Too Sandy Slope	1.00 0.16	Somewhat limited Slope	0.16	Very limited Too Sandy Seepage Gravel content Slope	1.00 1.00 0.67 0.16
Greyeagle-----	30	Very limited Too Sandy Depth to thin cemented pan	1.00 0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage Too Sandy	1.00 1.00 1.00 0.50
Wanomie-----	20	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan	1.00
2425: Orwash-----	45	Very limited Too Sandy Flooding	1.00 0.40	Somewhat limited Flooding	0.40	Very limited Too Sandy Seepage Gravel content	1.00 1.00 0.67
Yermo-----	25	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
Arizo-----	20	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00
2431: Zibate-----	55	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Zyplar-----	15	Very limited Depth to bedrock Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Depth to bedrock Slope Gravel content	1.00 0.63 0.05
Dedas-----	15	Very limited Depth to bedrock Slope Depth to thin cemented pan	1.00 1.00 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Depth to bedrock Gravel content Slope Seepage	1.00 1.00 1.00 1.00 1.00 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2432: Zibate-----	85	Very limited Depth to bedrock Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Depth to bedrock Gravel content Slope	1.00 1.00 0.63
2434: Cruzspring-----	40	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Schader-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2436: Zibate-----	70	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Gravel content Slope	1.00 1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2437: Cruzspring-----	70	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2441: Lewdlac-----	50	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Seepage	1.00 0.50
Sanwell-----	35	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
2451: Sanwell-----	40	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Sanwell-----	25	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Yermo-----	20	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
2461: Nowoy-----	60	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Carbonate content	1.00
Skelon-----	25	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
2471: Lewdlac-----	70	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Seepage	1.00 0.50
Yermo-----	15	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
2481: Bacho-----	70	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content	1.00 1.00
Greyeagle-----	20	Very limited Slope Too Sandy Depth to thin cemented pan	1.00 1.00 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Gravel content Slope Seepage Too Sandy	1.00 1.00 1.00 1.00 0.50
2482: Bacho-----	55	Somewhat limited Depth to thin cemented pan Slope	0.50 0.16	Somewhat limited Slope	0.16	Very limited Depth to cemented pan Gravel content Slope	1.00 1.00 0.16
Yermo-----	30	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
2491: Downeyville-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Blacktop-----	30	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.68	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Gravel content	1.00 1.00 0.68 0.20
Tokoper-----	20	Very limited Slope Depth to bedrock Depth to thin cemented pan Content of large stones	1.00 1.00 0.50 0.11	Very limited Slope	1.00	Very limited Depth to cemented pan Depth to bedrock Slope Gravel content Content of large stones	1.00 1.00 1.00 0.61 0.11
2492: Downeyville-----	40	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
Silverbow-----	35	Very limited Slope Content of large stones Depth to thin cemented pan	1.00 0.71 0.50	Very limited Slope	1.00	Very limited Depth to cemented pan Slope Too acid Content of large stones Seepage	1.00 1.00 1.00 0.71 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2493: Downeyville-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
Tognoni-----	30	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.88	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Gravel content	1.00 1.00 0.88 0.20
Stonell-----	25	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2494: Downeyville-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
Vindicator-----	25	Very limited Depth to bedrock Slope	1.00 0.04	Somewhat limited Slope	0.04	Very limited Depth to bedrock Gravel content Seepage Slope	1.00 1.00 0.50 0.04
Stewval-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
2495: Downeyville-----	55	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
Gabbvally-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
2496: Downeyville-----	40	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
Pintwater-----	30	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.24	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage Content of large stones	1.00 1.00 0.67 0.50 0.24
Upspring-----	15	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
2500: Commski-----	70	Very limited Slope	1.00	Very limited Slope	1.00	Very limited Gravel content Slope	1.00 1.00

TABLE 9b.--SANITARY FACILITIES--Continued

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TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2520: Vigus-----	40	Very limited Too Sandy	1.00	Not limited		Somewhat limited Seepage Too Sandy Gravel content	0.50 0.50 0.02
Fuegosta-----	25	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content	1.00 0.72
Izo-----	25	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Seepage Gravel content Too Sandy	1.00 1.00 0.50
2521: Vigus-----	35	Very limited Too Sandy	1.00	Not limited		Somewhat limited Seepage Too Sandy Gravel content	0.50 0.50 0.02
Wardenot-----	30	Somewhat limited Flooding Content of large stones	0.40 0.01	Somewhat limited Flooding	0.40	Very limited Seepage Gravel content Content of large stones	1.00 0.98 0.01
Fuegosta-----	25	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content	1.00 0.72
2531: Laxal-----	30	Not limited		Not limited		Very limited Gravel content Seepage	1.00 0.50
Stonell-----	30	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Unsel-----	25	Very limited Too Sandy	1.00	Not limited		Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00
2532: Laxal-----	50	Not limited		Not limited		Very limited Gravel content Seepage	1.00 0.50
Fang-----	35	Not limited		Not limited		Not limited	

TABLE 9b.--SANITARY FACILITIES--Continued

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TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2601: Cobatus-----	65	Very limited Depth to saturated zone Sodium content	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Sodium content Depth to saturated zone	1.00 0.02
Kawich-----	25	Very limited Too Sandy	1.00	Not limited		Very limited Too Sandy Seepage	1.00 1.00
2611: Corbilt-----	85	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Somewhat limited Gravel content Seepage Depth to cemented pan	0.50 0.50 0.05
2630: Wechech-----	55	Somewhat limited Depth to thin cemented pan Slope	0.50 0.04	Somewhat limited Slope	0.04	Very limited Depth to cemented pan Gravel content Slope	1.00 1.00 0.04
Commski-----	40	Somewhat limited Slope	0.04	Somewhat limited Slope	0.04	Very limited Gravel content Slope	1.00 0.04
2640: Downeyville-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
Advokay-----	35	Very limited Depth to bedrock Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 0.63 0.50 0.50
Pintwater-----	15	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.24	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage Content of large stones	1.00 1.00 0.67 0.50 0.24
2641: Advokay-----	35	Very limited Depth to bedrock Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 0.63 0.50 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ardivey-----	30	Very limited Too Sandy Content of large stones	1.00 0.06	Not limited		Very limited Seepage Gravel content Too Sandy Content of large stones	1.00 1.00 0.50 0.06
Leo-----	20	Not limited		Not limited		Very limited Seepage Gravel content	1.00 0.94
2642: Advokay-----	65	Very limited Depth to bedrock Slope	1.00 0.16	Somewhat limited Slope	0.16	Very limited Depth to bedrock Gravel content Seepage Slope	1.00 0.50 0.50 0.16
Blacktop-----	20	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.68	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Gravel content	1.00 1.00 0.68 0.20
2650: Luning-----	40	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Seepage	1.00
Wardenot-----	30	Somewhat limited Flooding Content of large stones	0.40 0.01	Somewhat limited Flooding	0.40	Very limited Seepage Gravel content Content of large stones	1.00 0.98 0.01
Izo-----	20	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Seepage Gravel content Too Sandy	1.00 1.00 0.50
2660: Stonell-----	35	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Wardenot-----	30	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Seepage Gravel content	1.00 1.00
Izo-----	20	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Seepage Gravel content Too Sandy	1.00 1.00 0.50

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2670:							
Ardivey-----	65	Very limited Too Sandy Content of large stones	1.00 0.06	Not limited		Very limited Seepage Gravel content Too Sandy Content of large stones	1.00 1.00 0.50 0.06
Izo-----	20	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Seepage Gravel content Too Sandy	1.00 1.00 0.50
2671:							
Ardivey-----	45	Very limited Too Sandy Content of large stones	1.00 0.06	Not limited		Very limited Seepage Gravel content Too Sandy Content of large stones	1.00 1.00 0.50 0.06
Stonell-----	20	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Izo-----	20	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Seepage Gravel content Too Sandy	1.00 1.00 0.50
2680:							
Espint-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Seepage Gravel content	1.00 1.00 0.50 0.20
Vindicator-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
Espint-----	20	Very limited Depth to bedrock Slope	1.00 0.04	Somewhat limited Slope	0.04	Very limited Depth to bedrock Seepage Gravel content Slope	1.00 0.50 0.20 0.04
2681:							
Espint-----	40	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Seepage Gravel content	1.00 1.00 0.50 0.20

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Stewval-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
Vindicator-----	15	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
2682: Espint-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Seepage Gravel content	1.00 1.00 0.50 0.20
Gabbvally-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Stewval-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
2690: Leo-----	55	Not limited		Not limited		Very limited Seepage Gravel content	1.00 0.94
Izo-----	35	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Seepage Gravel content Too Sandy	1.00 1.00 0.50
2701: Cobatus-----	90	Very limited Depth to saturated zone Sodium content	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Sodium content Depth to saturated zone	1.00 0.02
2710: Papoose-----	35	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Vindicator-----	35	Very limited Depth to bedrock Slope	1.00 0.04	Somewhat limited Slope	0.04	Very limited Depth to bedrock Gravel content Seepage Slope	1.00 1.00 0.50 0.04

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Espint-----	15	Very limited Depth to bedrock	1.00	Not limited		Very limited Depth to bedrock Seepage Gravel content	1.00 0.50 0.20
2720: Unsel-----	40	Very limited Too Sandy	1.00	Not limited		Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00
Stonell-----	30	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Veet-----	20	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Seepage Gravel content	1.00 1.00
2730: Gabbvally-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Blacktop-----	30	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.68	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Gravel content	1.00 1.00 0.68 0.20
Espint-----	20	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Seepage Gravel content	1.00 1.00 0.50 0.20
2731: Gabbvally-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Downeyville-----	25	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
Vindicator-----	25	Very limited Depth to bedrock Slope	1.00 0.04	Somewhat limited Slope	0.04	Very limited Depth to bedrock Gravel content Seepage Slope	1.00 1.00 0.50 0.04

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2732: Gabbvally-----	40	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Tognoni-----	25	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.31	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Gravel content	1.00 1.00 0.31 0.21
Downeyville-----	20	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
2734: Gabbvally-----	70	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Downeyville-----	20	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
2735: Gabbvally-----	45	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Wahguyhe-----	25	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2736: Gabbvally-----	35	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Brier-----	35	Very limited Slope Depth to bedrock Content of large stones Too clayey	1.00 1.00 0.65 0.50	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Slope Content of large stones Too clayey Gravel content	1.00 1.00 0.65 0.50 0.02
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2740: Tognoni-----	65	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.31	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Gravel content	1.00 1.00 0.31 0.21
Blacktop-----	20	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 1.00 0.50
2741: Blacktop-----	50	Very limited Slope Depth to bedrock Content of large stones	1.00 1.00 0.68	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Gravel content	1.00 1.00 0.68 0.20
Downeyville-----	20	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
Tognoni-----	20	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.88	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Gravel content	1.00 1.00 0.88 0.20
2750: Silverbow-----	50	Somewhat limited Content of large stones Depth to thin cemented pan	0.71 0.50	Not limited		Very limited Depth to cemented pan Too acid Content of large stones Seepage Gravel content	1.00 1.00 0.71 0.50 0.16

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Wardenot-----	20	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Seepage Gravel content	1.00 1.00
Izo-----	15	Very limited Flooding Too Sandy	1.00 1.00	Very limited Flooding	1.00	Very limited Seepage Gravel content Too Sandy	1.00 1.00 0.50
2760: Downeyville-----	35	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content Seepage	1.00 1.00 0.99 0.50
Unsel-----	30	Very limited Too Sandy Slope	1.00 0.16	Somewhat limited Slope	0.16	Very limited Too Sandy Seepage Gravel content Slope	1.00 1.00 1.00 0.16
Tokoper-----	20	Very limited Depth to bedrock Depth to thin cemented pan Slope Content of large stones	1.00 0.50 0.16 0.11	Somewhat limited Slope	0.16	Very limited Depth to cemented pan Depth to bedrock Gravel content Slope Content of large stones	1.00 1.00 0.61 0.16 0.11
2770: Bullfor-----	50	Very limited Too Sandy Depth to thin cemented pan	1.00 0.50	Not limited		Very limited Depth to cemented pan Seepage Too Sandy	1.00 1.00 0.50
Panor-----	30	Very limited Salinity	1.00	Not limited		Not limited	
Bluepoint-----	15	Very limited Too Sandy Slope	1.00 0.16	Somewhat limited Slope	0.16	Very limited Too Sandy Seepage Slope	1.00 1.00 0.16
2781: Haymont-----	50	Not limited		Not limited		Not limited	
Bluepoint-----	20	Very limited Too Sandy	1.00	Not limited		Very limited Too Sandy Seepage	1.00 1.00
Panor-----	15	Very limited Salinity	1.00	Not limited		Not limited	

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2810: Ashmed, moist-----	50	Very limited Salinity	1.00	Not limited		Very limited Seepage Gravel content	1.00 1.00
Yermo-----	20	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
Niavi-----	15	Very limited Flooding Content of large stones	1.00 0.01	Very limited Flooding	1.00	Very limited Seepage Gravel content Content of large stones	1.00 1.00 0.01
2820: Strozi-----	60	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 0.97 0.50
Corbilt-----	30	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Somewhat limited Seepage Gravel content Depth to cemented pan	0.50 0.37 0.05
2840: Armpup-----	60	Very limited Depth to bedrock Salinity	1.00 1.00	Not limited		Very limited Gravel content Depth to bedrock	1.00 0.08
Strozi-----	35	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 0.85 0.50
2850: Scottcas-----	50	Very limited Too Sandy	1.00	Not limited		Very limited Seepage Gravel content Too Sandy	1.00 1.00 0.50
Yermo-----	35	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
2860: Sezna-----	50	Somewhat limited Depth to thin cemented pan Content of large stones	0.50 0.18	Not limited		Very limited Depth to cemented pan Content of large stones Gravel content	1.00 0.18 0.06

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Yermo-----	35	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
2870: Kanackey-----	85	Very limited Depth to bedrock Slope Content of large stones	1.00 1.00 0.94	Very limited Slope	1.00	Very limited Depth to bedrock Slope Content of large stones Gravel content	1.00 1.00 0.94 0.05
2880: Bacho-----	45	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content	1.00 1.00
Yermo-----	25	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
Arizo-----	15	Very limited Too Sandy Flooding	1.00 0.40	Somewhat limited Flooding	0.40	Very limited Too Sandy Seepage Gravel content	1.00 1.00 1.00
2890: Nopah-----	35	Not limited		Not limited		Very limited Carbonate content	1.00
Woda-----	30	Somewhat limited Depth to thin cemented pan Slope	0.50 0.04	Somewhat limited Slope	0.04	Very limited Depth to cemented pan Carbonate content Slope Gravel content	1.00 1.00 0.04 0.01
Gullied Land-----	20	Not rated		Not rated		Not rated	
2900: Playas-----	100	Not rated		Not rated		Not rated	
2901: Playas-----	40	Not rated		Not rated		Not rated	

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Corbilt-----	30	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Somewhat limited Seepage	0.50
						Gravel content	0.37
						Depth to cemented pan	0.05
Bluepoint-----	20	Very limited Too Sandy	1.00	Not limited		Very limited Too Sandy Seepage	1.00 1.00
2903: Playas-----	45	Not rated		Not rated		Not rated	
Mobl-----	30	Very limited Salinity	1.00	Not limited		Somewhat limited Gravel content Seepage	0.57 0.50
Kawich-----	15	Very limited Too Sandy	1.00	Not limited		Very limited Too Sandy Seepage	1.00 1.00
2910: Dune Land-----	100	Not rated		Not rated		Not rated	
2920: Dumps-----	100	Not rated		Not rated		Not rated	
2930: Seralin-----	55	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Slope Depth to bedrock	1.00 1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 0.87
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
Sed-----	15	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
2940: Schader-----	40	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Sed-----	30	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
Cruzspring-----	15	Very limited Depth to bedrock Slope	1.00 1.00	Very limited Slope	1.00	Very limited Depth to bedrock Slope Gravel content	1.00 1.00 1.00
2950: Pits-----	100	Not rated		Not rated		Not rated	
2951: Pits-----	100	Not rated		Not rated		Not rated	
2960: Tomel-----	35	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content	1.00 1.00
Ardivey-----	30	Very limited Too Sandy Content of large stones	1.00 0.06	Not limited		Very limited Seepage Gravel content Too Sandy Content of large stones	1.00 1.00 0.50 0.06
Wardenot-----	20	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Seepage Gravel content	1.00 1.00
2961: Tomel-----	55	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content	1.00 1.00
Breko-----	15	Not limited		Not limited		Very limited Seepage Gravel content	1.00 1.00
Wardenot-----	15	Somewhat limited Flooding Content of large stones	0.40 0.01	Somewhat limited Flooding	0.40	Very limited Seepage Gravel content Content of large stones	1.00 0.98 0.01
2970: Destazo-----	40	Not limited		Not limited		Very limited Gravel content Carbonate content	1.00 1.00

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Nowoy-----	30	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Carbonate content	1.00
Gullied Land-----	20	Not rated		Not rated		Not rated	
2971: Upspring-----	85	Very limited Depth to bedrock Slope	1.00 0.63	Somewhat limited Slope	0.63	Very limited Depth to bedrock Gravel content Slope Seepage	1.00 1.00 0.63 0.50
2990: Lealandic-----	60	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content	1.00 1.00
Ashmed-----	30	Very limited Salinity	1.00	Not limited		Very limited Seepage Gravel content	1.00 1.00
3021: Casaga-----	45	Not limited		Not limited		Somewhat limited Gravel content	0.99
Destazo-----	25	Not limited		Not limited		Very limited Gravel content Carbonate content	1.00 1.00
Yurm-----	20	Not limited		Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
3022: Casaga-----	40	Very limited Salinity Flooding	1.00 0.40	Somewhat limited Flooding	0.40	Somewhat limited Gravel content	0.71
Woda-----	35	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Carbonate content	1.00 1.00
Yermo-----	20	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Somewhat limited Gravel content Seepage	0.98 0.50
3052: Bobnbob-----	65	Very limited Depth to saturated zone Flooding	1.00 0.40	Very limited Depth to saturated zone Flooding	1.00 0.40	Not limited	

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Caslo-----	20	Very limited Flooding Depth to saturated zone Sodium content Salinity	1.00 1.00 1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Sodium content Carbonate content Depth to saturated zone	1.00 1.00 1.00
3101: Bluepoint-----	45	Very limited Too Sandy Slope	1.00 0.16	Somewhat limited Slope	0.16	Very limited Seepage Too Sandy Slope	1.00 0.50 0.16
Besherm-----	40	Not limited		Not limited		Very limited Carbonate content Hard to compact	1.00 1.00
3120: Nowoy-----	45	Somewhat limited Flooding	0.40	Somewhat limited Flooding	0.40	Very limited Carbonate content	1.00
Tanazza-----	25	Not limited		Not limited		Very limited Carbonate content	1.00
Yurm-----	20	Not limited		Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
3150: Casaga-----	85	Not limited		Not limited		Somewhat limited Gravel content	0.99
3230: Alko-----	60	Very limited Salinity Depth to thin cemented pan	1.00 0.50	Not limited		Very limited Depth to cemented pan Seepage	1.00 0.50
Casaga-----	30	Very limited Salinity Flooding	1.00 0.40	Somewhat limited Flooding	0.40	Somewhat limited Gravel content	0.68
3252: Bobnbob-----	70	Very limited Flooding Depth to saturated zone	1.00 1.00	Very limited Flooding Depth to saturated zone	1.00 1.00	Not limited	
Cobatus-----	15	Very limited Depth to saturated zone Sodium content	1.00 1.00	Very limited Depth to saturated zone	1.00	Very limited Sodium content Depth to saturated zone	1.00 0.02

TABLE 9b.--SANITARY FACILITIES--Continued

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill	Value	Area sanitary landfill	Value	Daily cover for landfill	Value
		Rating class and limiting features		Rating class and limiting features		Rating class and limiting features	
3302: Rumpah-----	90	Not limited		Not limited		Very limited Hard to compact	1.00
3313: Besherm-----	85	Not limited		Not limited		Very limited Carbonate content Hard to compact	1.00 1.00
3320: Haymont-----	85	Not limited		Not limited		Not limited	
3333: Nopah-----	85	Not limited		Not limited		Very limited Carbonate content	1.00
4010: Tanazza-----	35	Not limited		Not limited		Very limited Carbonate content	1.00
Wechech-----	35	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
Wodavar-----	15	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content Seepage	1.00 1.00 0.50
4030: Wechech-----	45	Somewhat limited Depth to thin cemented pan	0.50	Not limited		Very limited Depth to cemented pan Gravel content	1.00 1.00
Nopah-----	20	Not limited		Not limited		Very limited Carbonate content	1.00
Yermo-----	20	Not limited		Not limited		Somewhat limited Gravel content Seepage	0.98 0.50
4060: Besherm-----	70	Not limited		Not limited		Very limited Carbonate content Hard to compact	1.00 1.00
Tanazza-----	15	Not limited		Not limited		Very limited Carbonate content	1.00

TABLE 9b.--SANITARY FACILITIES

Map symbol and soil name	Pct. of map unit	Trench sanitary landfill		Area sanitary landfill		Daily cover for landfill	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
4070: Gynelle-----	35	Somewhat limited Flooding Content of large stones	0.40 0.01	Somewhat limited Flooding	0.40	Very limited Seepage Gravel content Content of large stones	1.00 0.60 0.01
Kawich-----	25	Very limited Too Sandy Slope	1.00 1.00	Very limited Slope	1.00	Very limited Too Sandy Seepage Slope	1.00 1.00 1.00
Cirac-----	25	Very limited Too Sandy Salinity Flooding	1.00 1.00 0.40	Somewhat limited Flooding	0.40	Very limited Too Sandy Seepage	1.00 0.50
4071: Corbilt-----	85	Not limited		Not limited		Somewhat limited Seepage Gravel content	0.50 0.32
4080: Water-----	100	Not rated		Not rated		Not rated	

TABLE 10a.--CONSTRUCTION MATERIALS

(The information in this table indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The greater the value, the greater the likelihood that the bottom layer or thickest layer of the soil is a source of sand or gravel. See text for further explanation of ratings in this table.)

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
1314:					
Weiser-----	70	Fair		Fair	
		Bottom layer	0.43	Thickest layer	0.07
		Thickest layer	0.43	Bottom layer	0.08
Wechech-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
1315:					
Lastchance-----	40	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.00
Lastchance, upper elevation fans-----	30	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.00
Commski-----	15	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
1316:					
Lastchance-----	40	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.00
Ferrogold-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Commski-----	15	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
1317:					
Commski-----	70	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
Lastchance-----	15	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.00
1320:					
Boxspring-----	50	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Zeheme-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
1321: Boxspring-----	40	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.00
Seralin-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
1340: Longjim-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Niavi-----	15	Fair		Fair	
		Thickest layer	0.29	Bottom layer	0.22
		Bottom layer	0.29	Thickest layer	0.22
1871: Irongold-----	45	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.31	Bottom layer	0.43
Irongold-----	25	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.31	Bottom layer	0.43
Weiser-----	15	Fair		Fair	
		Thickest layer	0.69	Bottom layer	0.09
		Bottom layer	0.69	Thickest layer	0.09
2002: Rock Outcrop-----	45	Not rated		Not rated	
Upspring-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rubble Land-----	15	Not rated		Not rated	
2004: Rock Outcrop-----	55	Not rated		Not rated	
Zyplar-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2005:					
Rock Outcrop-----	50	Not rated		Not rated	
St. Thomas-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
St. Thomas-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2010:					
Longjim-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2011:					
Sanwell-----	45	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.06	Thickest layer	0.10
Sanwell-----	40	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.06	Thickest layer	0.09
2012:					
Zalda-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Greyeagle-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
Upspring-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2013:					
Longjim-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yurm-----	40	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.04
2020:					
Weiser-----	70	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.08
		Bottom layer	0.43	Thickest layer	0.08
Canoto-----	25	Fair		Fair	
		Bottom layer	0.19	Bottom layer	0.09
		Thickest layer	0.19	Thickest layer	0.09

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2021:					
Weiser-----	70	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.08
		Bottom layer	0.43	Thickest layer	0.08
Nickel-----	25	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.08
		Thickest layer	0.50	Thickest layer	0.10
2023:					
Commski-----	35	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
Commski-----	30	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
Sezna-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2030:					
Corbilt-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
2031:					
Corbilt-----	60	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
Skelon-----	35	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
2040:					
Yurm-----	70	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.04
Canoto-----	15	Fair		Fair	
		Bottom layer	0.19	Bottom layer	0.09
		Thickest layer	0.19	Thickest layer	0.09
Yurm, moist-----	10	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.04
2050:					
Canoto-----	50	Fair		Fair	
		Bottom layer	0.19	Bottom layer	0.09
		Thickest layer	0.19	Thickest layer	0.09
Naye-----	35	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.07

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2051:					
Yermo-----	35	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Woda-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Nowoy-----	20	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.06	Thickest layer	0.10
2052:					
Canoto-----	85	Fair		Fair	
		Bottom layer	0.19	Bottom layer	0.09
		Thickest layer	0.19	Thickest layer	0.09
2053:					
Yermo-----	60	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Greyeagle-----	20	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
Arizo-----	15	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.09
		Bottom layer	0.12	Bottom layer	0.43
2054:					
Yermo, hot-----	40	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Yermo-----	30	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Arizo-----	15	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34
2055:					
Canoto-----	60	Fair		Fair	
		Bottom layer	0.19	Bottom layer	0.09
		Thickest layer	0.19	Thickest layer	0.09
Canoto, MOIST-----	25	Fair		Fair	
		Bottom layer	0.19	Bottom layer	0.09
		Thickest layer	0.19	Thickest layer	0.09
2057:					
Yermo-----	50	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Commski-----	40	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
2058: Canoto-----	50	Fair		Fair	
		Bottom layer	0.19	Bottom layer	0.09
		Thickest layer	0.19	Thickest layer	0.09
Nickel-----	40	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.08
		Thickest layer	0.50	Thickest layer	0.10
2060: Purob-----	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Irongold-----	25	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.31	Bottom layer	0.43
2061: Vace-----	95	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.00	Bottom layer	0.24
2062: Purob-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Niavi-----	10	Fair		Fair	
		Thickest layer	0.29	Bottom layer	0.22
		Bottom layer	0.29	Thickest layer	0.22
2064: Longjim, summer precip.-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Purob-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Niavi-----	10	Fair		Fair	
		Thickest layer	0.29	Bottom layer	0.22
		Bottom layer	0.29	Thickest layer	0.22
2070: Shamock-----	90	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
2071: Shamock-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Skelon-----	40	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
2080: St. Thomas-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	30	Not rated		Not rated	
Commski-----	20	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
2081: St. Thomas-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tecopa-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
2090: Breko-----	55	Fair		Fair	
		Thickest layer	0.06	Thickest layer	0.03
		Bottom layer	0.25	Bottom layer	0.09
Veet-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.09
2110: Pahrump-----	90	Fair		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.38	Bottom layer	0.07
2121: Commski-----	60	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
Arizo-----	30	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.20
		Thickest layer	0.19	Bottom layer	0.34
2131: Upspring-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Shorim-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Rock Outcrop-----	15	Not rated		Not rated	
2140: Jonnic-----	75	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Niavi-----	10	Fair		Fair	
		Thickest layer	0.29	Bottom layer	0.22
		Bottom layer	0.29	Thickest layer	0.22
2151: Arizo-----	40	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34
Bluepoint-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.44
		Thickest layer	0.00	Bottom layer	0.70
Dune Land-----	15	Not rated		Not rated	
2152: Arizo-----	85	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34
2153: Arizo-----	35	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34
Corbilt-----	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
Commski-----	25	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
2161: Casaga-----	55	Fair		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.12	Bottom layer	0.09
Nowoy-----	30	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.06	Thickest layer	0.10
2162: Casaga-----	40	Fair		Fair	
		Thickest layer	0.19	Thickest layer	0.00
		Bottom layer	0.19	Bottom layer	0.09
Panor-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Yermo-----	20	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
2171: Sanwell-----	60	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.06	Thickest layer	0.09
Skelon-----	30	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
2172: Sanwell-----	60	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.06	Thickest layer	0.09
Yermo-----	35	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
2181: Skelon-----	30	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
Yermo-----	30	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Pinez-----	25	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.03
2184: Skelon-----	60	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
Bullfor-----	25	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.10
		Bottom layer	0.25	Thickest layer	0.24
2185: Skelon-----	50	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
Yermo-----	30	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Ashmed-----	15	Fair		Fair	
		Thickest layer	0.50	Thickest layer	0.03
		Bottom layer	0.50	Bottom layer	0.09

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2186:					
Yermo-----	35	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Skelon-----	35	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
Pinez-----	15	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.03
2191:					
Pinez-----	40	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.03
Lealandic-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Arizo-----	20	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34
2201:					
Corbilt-----	65	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
Arizo-----	30	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34
2202:					
Corbilt-----	50	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
Migern-----	25	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.24
Arizo-----	20	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34
2204:					
Corbilt-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
Wodavar-----	25	Fair		Fair	
		Thickest layer	0.04	Bottom layer	0.00
		Bottom layer	0.06	Thickest layer	0.04

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Sanwell-----	25	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.06	Thickest layer	0.09
2212: Yermo-----	70	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Bullfor-----	20	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.10
		Bottom layer	0.25	Thickest layer	0.24
2214: Yermo-----	65	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Arizo-----	30	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34
2215: Yermo-----	60	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Greyeagle-----	25	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
2216: Yermo-----	65	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Arizo-----	20	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.20
		Thickest layer	0.19	Bottom layer	0.34
2218: Sanwell-----	50	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.06	Thickest layer	0.09
Commski-----	45	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
2220: Canoto-----	65	Fair		Fair	
		Bottom layer	0.19	Thickest layer	0.00
		Thickest layer	0.19	Bottom layer	0.09
Arizo-----	20	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2221: Sanwell-----	60	Fair Thickest layer Bottom layer	 0.00 0.06	Fair Bottom layer Thickest layer	 0.09 0.09
Greyeagle-----	30	Fair Thickest layer Bottom layer	 0.00 0.06	Fair Thickest layer Bottom layer	 0.00 0.29
2222: Niavi-----	55	Fair Thickest layer Bottom layer	 0.29 0.29	Fair Bottom layer Thickest layer	 0.22 0.22
Jonnic-----	35	Poor Bottom layer Thickest layer	 0.00 0.00	Poor Bottom layer Thickest layer	 0.00 0.00
2230: Yermo-----	60	Fair Bottom layer Thickest layer	 0.12 0.12	Fair Bottom layer Thickest layer	 0.09 0.09
Skelon-----	25	Fair Thickest layer Bottom layer	 0.12 0.49	Fair Thickest layer Bottom layer	 0.10 0.49
2233: Yermo-----	35	Fair Bottom layer Thickest layer	 0.12 0.12	Fair Bottom layer Thickest layer	 0.09 0.09
Skelon-----	25	Fair Thickest layer Bottom layer	 0.12 0.49	Fair Thickest layer Bottom layer	 0.10 0.49
Bluepoint-----	25	Poor Bottom layer Thickest layer	 0.00 0.00	Fair Thickest layer Bottom layer	 0.44 0.70
2250: Tokoper-----	40	Poor Bottom layer Thickest layer	 0.00 0.00	Poor Bottom layer Thickest layer	 0.00 0.00
Upspring-----	30	Poor Bottom layer Thickest layer	 0.00 0.00	Poor Bottom layer Thickest layer	 0.00 0.00
Rock Outcrop-----	15	Not rated		Not rated	
2251: Tokoper-----	35	Poor Bottom layer Thickest layer	 0.00 0.00	Poor Bottom layer Thickest layer	 0.00 0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Downeyville-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pintwater-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2252: Tokoper-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Blacktop-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2253: Tokoper-----	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Ardivey-----	25	Fair		Fair	
		Thickest layer	0.06	Thickest layer	0.00
		Bottom layer	0.20	Bottom layer	0.20
2254: Tokoper-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Downeyville-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espint-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2260: Greyeagle-----	85	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
2261: Longjim-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yermo-----	25	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Dedas-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2263:					
Greyeagle-----	65	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
Sanwell-----	15	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.06	Thickest layer	0.09
Yermo-----	15	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
2266:					
Greyeagle-----	95	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
2267:					
Greyeagle-----	75	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
Skelon-----	20	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
2268:					
Greyeagle-----	70	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
Arizo-----	25	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.20
		Thickest layer	0.19	Bottom layer	0.34
2269:					
Greyeagle-----	45	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
Yermo-----	30	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Strozi-----	20	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.10
		Bottom layer	0.12	Thickest layer	0.10
2270:					
Bluepoint-----	85	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.26
		Thickest layer	0.00	Bottom layer	0.70
2271:					
Kawich-----	40	Poor		Good	
		Bottom layer	0.00		
		Thickest layer	0.00		

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Corbilt-----	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
Wanomie-----	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.08
		Thickest layer	0.00	Bottom layer	0.09
2280: Shorim-----	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Zalda-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Upspring-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2281: Shorim-----	80	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yermo-----	15	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
2282: Dedas-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Orwash-----	20	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.19
		Thickest layer	0.00	Thickest layer	0.19
2290: Gabbvally-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Upspring-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rubble Land-----	15	Not rated		Not rated	
2291: Gabbvally-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2301:					
Tecopa-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Haleburu-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
2302:					
Tecopa-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	30	Not rated		Not rated	
Upspring-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2304:					
Tecopa-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Zibate-----	25	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
2305:					
Tecopa-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
2310:					
Nowoy-----	45	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.06	Thickest layer	0.10
Commski-----	40	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
2312:					
Commski-----	55	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Tanazza-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2320: Wahguyhe-----	40	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.09	Thickest layer	0.09
Rock Outcrop-----	30	Not rated		Not rated	
Gabbvally-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2341: Naye-----	85	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.12	Thickest layer	0.07
2372: Zalda-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Bluepoint-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.44
		Thickest layer	0.00	Bottom layer	0.70
Rock Outcrop-----	20	Not rated		Not rated	
2373: Zalda-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rubble Land-----	25	Not rated		Not rated	
Skelon-----	20	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
2381: Armpup-----	55	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.31	Thickest layer	0.01
Ashmed-----	30	Fair		Fair	
		Thickest layer	0.50	Thickest layer	0.03
		Bottom layer	0.50	Bottom layer	0.09
2391: Commski-----	65	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Ashmed-----	25	Fair		Fair	
		Thickest layer	0.50	Thickest layer	0.03
		Bottom layer	0.50	Bottom layer	0.09
2392: Commski-----	65	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
Ashmed-----	25	Fair		Fair	
		Thickest layer	0.50	Thickest layer	0.03
		Bottom layer	0.50	Bottom layer	0.09
2393: Commski-----	70	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
Yermo-----	25	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
2400: Mobl-----	65	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.09
		Bottom layer	0.00	Bottom layer	0.56
Scottcas-----	20	Fair		Fair	
		Bottom layer	0.69	Thickest layer	0.09
		Thickest layer	0.69	Bottom layer	0.32
2401: Skelon-----	55	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
Bacho-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2421: Orwash-----	50	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.19
		Thickest layer	0.00	Thickest layer	0.19
Wilst-----	25	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.06	Thickest layer	0.08
Agon-----	20	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.22
2422: Orwash-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.19
		Thickest layer	0.00	Thickest layer	0.19

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Louderback-----	25	Poor		Good	
		Bottom layer	0.00	Thickest layer	0.90
		Thickest layer	0.00	Bottom layer	0.99
Arizo-----	15	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34
2423: Orwash-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.19
		Thickest layer	0.00	Thickest layer	0.19
Greyeagle-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
Wanomie-----	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.08
		Thickest layer	0.00	Bottom layer	0.09
2425: Orwash-----	45	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.19
		Thickest layer	0.00	Thickest layer	0.19
Yermo-----	25	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Arizo-----	20	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.09
		Thickest layer	0.19	Bottom layer	0.34
2431: Zibate-----	55	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.00
Zyplar-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Dedas-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2432: Zibate-----	85	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.00
2434: Cruzspring-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Schader-----	30	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.26	Thickest layer	0.06
Rock Outcrop-----	15	Not rated		Not rated	
2436: Zibate-----	70	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
2437: Cruzspring-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
2441: Lewdlac-----	50	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.19	Thickest layer	0.04
Sanwell-----	35	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.06	Thickest layer	0.09
2451: Sanwell-----	40	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.06	Thickest layer	0.09
Sanwell-----	25	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.09
		Bottom layer	0.06	Thickest layer	0.09
Yermo-----	20	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
2461: Nowoy-----	60	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.06	Thickest layer	0.10
Skelon-----	25	Fair		Fair	
		Thickest layer	0.12	Thickest layer	0.10
		Bottom layer	0.49	Bottom layer	0.49
2471: Lewdlac-----	70	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.00
		Bottom layer	0.19	Thickest layer	0.04

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Yermo-----	15	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
2481: Bacho-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Greyeagle-----	20	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
2482: Bacho-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yermo-----	30	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
2491: Downeyville-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Blacktop-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tokoper-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2492: Downeyville-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Silverbow-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
2493: Downeyville-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tognoni-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Stonell-----	25	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.04
		Thickest layer	0.12	Bottom layer	0.39

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2494:					
Downeyville-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Vindicator-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Stewval-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2495:					
Downeyville-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Gabbvally-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2496:					
Downeyville-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pintwater-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Upspring-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2500:					
Commski-----	70	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
Greyeagle-----	20	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.06	Bottom layer	0.29
2501:					
Wanomie-----	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.08
		Thickest layer	0.00	Bottom layer	0.09
Corbilt-----	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
2510:					
Fuegosta-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Tomel-----	25	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.04
		Bottom layer	0.50	Bottom layer	0.91
Izo-----	20	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2511: Fuegosta-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wardenot-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.08
		Bottom layer	0.29	Bottom layer	0.29
Izo-----	20	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2520: Vigus-----	40	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.38
Fuegosta-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Izo-----	25	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2521: Vigus-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.38
Wardenot-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.08
		Bottom layer	0.29	Bottom layer	0.29
Fuegosta-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2531: Laxal-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.08
		Bottom layer	0.25	Bottom layer	0.10
Stonell-----	30	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.04
		Thickest layer	0.12	Bottom layer	0.39
Unsel-----	25	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.09
		Bottom layer	0.12	Bottom layer	0.99

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2532:					
Laxal-----	50	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.08
		Bottom layer	0.25	Bottom layer	0.10
Fang-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.08
		Thickest layer	0.00	Bottom layer	0.93
2540:					
Lidan-----	65	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.14	Thickest layer	0.01
Izo-----	20	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2550:					
Stonewall-----	60	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.44	Bottom layer	0.09
Izo-----	15	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
Lidan-----	15	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.14	Thickest layer	0.01
2570:					
Stargo-----	70	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.03
		Thickest layer	0.00	Bottom layer	0.15
Playas-----	20	Not rated		Not rated	
2580:					
Wardenot-----	50	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.34
		Bottom layer	0.31	Thickest layer	0.34
Izo-----	35	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2601:					
Cobatus-----	65	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Kawich-----	25	Poor		Good	
		Bottom layer	0.00		
		Thickest layer	0.00		

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2611: Corbilt-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
2630: Wechech-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Commski-----	40	Fair		Fair	
		Bottom layer	0.50	Bottom layer	0.09
		Thickest layer	0.50	Thickest layer	0.09
2640: Downeyville-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Advokay-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Pintwater-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2641: Advokay-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Ardivay-----	30	Fair		Fair	
		Thickest layer	0.06	Thickest layer	0.00
		Bottom layer	0.20	Bottom layer	0.20
Leo-----	20	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.09
		Bottom layer	0.00	Bottom layer	0.15
2642: Advokay-----	65	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Blacktop-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2650: Luning-----	40	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.16
		Thickest layer	0.00	Thickest layer	0.45
Wardenot-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.08
		Bottom layer	0.29	Bottom layer	0.29

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Izo-----	20	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2660: Stonell-----	35	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.04
		Thickest layer	0.12	Bottom layer	0.39
Wardenot-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.09
		Bottom layer	0.31	Bottom layer	0.34
Izo-----	20	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2670: Ardivey-----	65	Fair		Fair	
		Thickest layer	0.06	Thickest layer	0.00
		Bottom layer	0.20	Bottom layer	0.20
Izo-----	20	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2671: Ardivey-----	45	Fair		Fair	
		Thickest layer	0.06	Thickest layer	0.00
		Bottom layer	0.20	Bottom layer	0.20
Stonell-----	20	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.04
		Thickest layer	0.12	Bottom layer	0.39
Izo-----	20	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2680: Espint-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Vindicator-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espint-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2681: Espint-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Stewval-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Vindicator-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2682: Espint-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Gabbvally-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Stewval-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2690: Leo-----	55	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.09
		Bottom layer	0.00	Bottom layer	0.15
Izo-----	35	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2701: Cobatus-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2710: Papoose-----	35	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.00
		Bottom layer	0.62	Bottom layer	0.12
Vindicator-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espint-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2720: Unsel-----	40	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.09
		Bottom layer	0.12	Bottom layer	0.99
Stonell-----	30	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.04
		Thickest layer	0.12	Bottom layer	0.39

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Veet-----	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.09
		Thickest layer	0.00	Bottom layer	0.09
2730: Gabbvally-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Blacktop-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Espint-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2731: Gabbvally-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Downeyville-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Vindicator-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2732: Gabbvally-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tognoni-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Downeyville-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2734: Gabbvally-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Downeyville-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2735: Gabbvally-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Wahguyhe-----	25	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.09	Thickest layer	0.09
Rock Outcrop-----	15	Not rated		Not rated	
2736: Gabbvally-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Brier-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
2740: Tognoni-----	65	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Blacktop-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2741: Blacktop-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Downeyville-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tognoni-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2750: Silverbow-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wardenot-----	20	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.34
		Bottom layer	0.31	Thickest layer	0.34
Izo-----	15	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.77
		Bottom layer	0.50	Thickest layer	0.77
2760: Downeyville-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Unsel-----	30	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.09
		Bottom layer	0.12	Bottom layer	0.99
Tokoper-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2770: Bullfor-----	50	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.10
		Bottom layer	0.25	Thickest layer	0.24
Panor-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Bluepoint-----	15	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.44
		Thickest layer	0.00	Bottom layer	0.70
2781: Haymont-----	50	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.04
Bluepoint-----	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.44
		Thickest layer	0.00	Bottom layer	0.70
Panor-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2810: Ashmed, moist-----	50	Fair		Fair	
		Thickest layer	0.50	Thickest layer	0.03
		Bottom layer	0.50	Bottom layer	0.09
Yermo-----	20	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Niavi-----	15	Fair		Fair	
		Thickest layer	0.29	Bottom layer	0.22
		Bottom layer	0.29	Thickest layer	0.22
2820: Strozi-----	60	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.10
		Bottom layer	0.12	Thickest layer	0.10
Corbilt-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2840:					
Armpup-----	60	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.31	Thickest layer	0.01
Strozi-----	35	Fair		Fair	
		Thickest layer	0.06	Bottom layer	0.10
		Bottom layer	0.12	Thickest layer	0.10
2850:					
Scottcas-----	50	Fair		Fair	
		Bottom layer	0.69	Thickest layer	0.09
		Thickest layer	0.69	Bottom layer	0.32
Yermo-----	35	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
2860:					
Sezna-----	50	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yermo-----	35	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
2870:					
Kanackey-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2880:					
Bacho-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yermo-----	25	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
Arizo-----	15	Fair		Fair	
		Bottom layer	0.12	Thickest layer	0.20
		Thickest layer	0.19	Bottom layer	0.34
2890:					
Nopah-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Woda-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Gullied Land-----	20	Not rated		Not rated	

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
2900: Playas-----	100	Not rated		Not rated	
2901: Playas-----	40	Not rated		Not rated	
Corbilt-----	30	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.08
Bluepoint-----	20	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.44
		Thickest layer	0.00	Bottom layer	0.70
2903: Playas-----	45	Not rated		Not rated	
Mobl-----	30	Poor		Fair	
		Thickest layer	0.00	Thickest layer	0.09
		Bottom layer	0.00	Bottom layer	0.56
Kawich-----	15	Poor		Good	
		Bottom layer	0.00		
		Thickest layer	0.00		
2910: Dune Land-----	100	Not rated		Not rated	
2920: Dumps-----	100	Not rated		Not rated	
2930: Seralin-----	55	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Rock Outcrop-----	15	Not rated		Not rated	
Sed-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2940: Schader-----	40	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.26	Thickest layer	0.06
Sed-----	30	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Cruzspring-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2950: Pits-----	100	Not rated		Not rated	
2951: Pits-----	100	Not rated		Not rated	
2960: Tomel-----	35	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.04
		Bottom layer	0.50	Bottom layer	0.91
Ardivey-----	30	Fair		Fair	
		Thickest layer	0.06	Thickest layer	0.00
		Bottom layer	0.20	Bottom layer	0.20
Wardenot-----	20	Fair		Fair	
		Thickest layer	0.00	Bottom layer	0.34
		Bottom layer	0.31	Thickest layer	0.34
2961: Tomel-----	55	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.04
		Bottom layer	0.50	Bottom layer	0.91
Breko-----	15	Fair		Fair	
		Thickest layer	0.06	Thickest layer	0.03
		Bottom layer	0.25	Bottom layer	0.09
Wardenot-----	15	Fair		Fair	
		Thickest layer	0.00	Thickest layer	0.08
		Bottom layer	0.29	Bottom layer	0.29
2970: Destazo-----	40	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.38	Thickest layer	0.00
Nowoy-----	30	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.06	Thickest layer	0.10
Gullied Land-----	20	Not rated		Not rated	
2971: Upspring-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
2990: Lealandic-----	60	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Ashmed-----	30	Fair		Fair	
		Thickest layer	0.50	Thickest layer	0.03
		Bottom layer	0.50	Bottom layer	0.09
3021: Casaga-----	45	Fair		Fair	
		Thickest layer	0.19	Thickest layer	0.00
		Bottom layer	0.19	Bottom layer	0.09
Destazo-----	25	Fair		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.38	Thickest layer	0.00
Yurm-----	20	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.04
3022: Casaga-----	40	Fair		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.12	Bottom layer	0.09
Woda-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yermo-----	20	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
3052: Bobnbob-----	65	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
Caslo-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
3101: Bluepoint-----	45	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.20
		Thickest layer	0.00	Bottom layer	0.70
Besherm-----	40	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
3120: Nowoy-----	45	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.06	Thickest layer	0.10
Tanazza-----	25	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
Yurm-----	20	Fair		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.04	Thickest layer	0.04
3150: Casaga-----	85	Fair		Fair	
		Thickest layer	0.19	Thickest layer	0.00
		Bottom layer	0.19	Bottom layer	0.09
3230: Alko-----	60	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.86
Casaga-----	30	Fair		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.12	Bottom layer	0.09
3252: Bohnbob-----	70	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.00
		Thickest layer	0.00	Bottom layer	0.09
Cobatus-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
3302: Rumpah-----	90	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
3313: Besherm-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
3320: Haymont-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.04
3333: Nopah-----	85	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
4010: Tanazza-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wechech-----	35	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Wodavar-----	15	Fair		Fair	
		Thickest layer	0.04	Bottom layer	0.00
		Bottom layer	0.06	Thickest layer	0.04

TABLE 10a.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of gravel		Potential source of sand	
		Rating class	Value	Rating class	Value
4030:					
Wechech-----	45	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Nopah-----	20	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Yermo-----	20	Fair		Fair	
		Bottom layer	0.12	Bottom layer	0.09
		Thickest layer	0.12	Thickest layer	0.09
4060:					
Besherm-----	70	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
Tanazza-----	15	Poor		Poor	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.00
4070:					
Gynelle-----	35	Poor		Fair	
		Bottom layer	0.00	Thickest layer	0.20
		Thickest layer	0.00	Bottom layer	0.20
Kawich-----	25	Poor		Good	
		Bottom layer	0.00		
		Thickest layer	0.00		
Cirac-----	25	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.00
		Thickest layer	0.00	Thickest layer	0.09
4071:					
Corbilt-----	85	Poor		Fair	
		Bottom layer	0.00	Bottom layer	0.08
		Thickest layer	0.00	Thickest layer	0.17
4080:					
Water-----	100	Not rated		Not rated	

TABLE 10b.--CONSTRUCTION MATERIALS

(The information in this TABLE indicates the dominant soil condition but does not eliminate the need for onsite investigation. The numbers in the value columns range from 0.00 to 0.99. The smaller the value, the greater the limitation. See text for further explanation of ratings in this TABLE.)

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1314: Weiser-----	70	Poor Carbonate content Low content of organic matter Droughty	0.00 0.12 0.62	Fair Cobble content	0.95	Poor Hard to reclaim Rock fragments Carbonate content	0.00 0.00 0.00
Wechech-----	15	Poor Droughty Depth to cemented pan Too alkaline Low content of organic matter Carbonate content	0.00 0.00 0.00 0.00 0.12 0.16	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Carbonate content	0.00 0.00 0.16
1315: Lastchance-----	40	Poor Droughty Too alkaline Depth to cemented pan Low content of organic matter Sodium content Carbonate content	0.00 0.00 0.00 0.08 0.22 0.32	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Sodium content Carbonate content	0.00 0.00 0.22 0.32
Lastchance, upper elevation fans-----	30	Poor Droughty Too alkaline Depth to cemented pan Low content of organic matter Sodium content Carbonate content	0.00 0.00 0.00 0.08 0.22 0.32	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Sodium content Carbonate content	0.00 0.00 0.22 0.32
Commski-----	15	Poor Droughty Carbonate content Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Good		Poor Hard to reclaim Rock fragments Carbonate content Salinity Sodium content	0.00 0.00 0.00 0.50 0.78

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
1316: Lastchance-----	40	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Too alkaline	0.00			Depth to cemented pan	0.00
		Depth to cemented pan	0.00			Sodium content	0.22
		Low content of organic matter	0.08			Carbonate content	0.32
		Sodium content	0.22				
		Carbonate content	0.32				
Ferrogold-----	30	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Carbonate content	0.08			Carbonate content	0.92
		Low content of organic matter	0.18				
Commski-----	15	Poor Droughty	0.00	Good		Poor Hard to reclaim	0.00
		Carbonate content	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Carbonate content	0.00
		Sodium content	0.78			Salinity	0.50
						Sodium content	0.78
1317: Commski-----	70	Poor Droughty	0.00	Good		Poor Hard to reclaim	0.00
		Carbonate content	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Carbonate content	0.00
		Sodium content	0.78			Salinity	0.50
						Sodium content	0.78
Lastchance-----	15	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Too alkaline	0.00			Depth to cemented pan	0.00
		Depth to cemented pan	0.00			Sodium content	0.22
		Low content of organic matter	0.08			Carbonate content	0.32
		Sodium content	0.22				
		Carbonate content	0.32				
1320: Boxspring-----	50	Poor Droughty	0.00	Poor Depth to bedrock	0.00	Poor Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Carbonate content	0.08			Slope	0.00
		Low content of organic matter	0.12			Carbonate content	0.08

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Zeheme-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Carbonate content	0.00			Slope	0.00
		Low content of organic matter	0.12			Carbonate content	0.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
1321: Boxspring-----	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Carbonate content	0.08			Depth to bedrock	0.00
		Low content of organic matter	0.12			Carbonate content	0.08
Seralin-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.00
						Salinity	0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
1340: Longjim-----	70	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Too alkaline	0.00			Slope	0.84
		Low content of organic matter	0.12				
		Carbonate content	0.68				
Niavi-----	15	Poor		Fair		Poor	
		Droughty	0.00	Cobble content	0.53	Hard to reclaim	0.00
		Low content of organic matter	0.02			Rock fragments	0.00
		Too sandy	0.22			Too sandy	0.22
1871: Irongold-----	45	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Carbonate content	0.00			Rock fragments	0.12
		Depth to cemented pan	0.00			Carbonate content	0.80
		Low content of organic matter	0.12				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Irongold-----	25	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Depth to cemented pan	0.00
		Carbonate content	0.00			Rock fragments	0.12
		Depth to cemented pan	0.00			Slope	0.37
		Low content of organic matter	0.12			Carbonate content	0.80
Weiser-----	15	Poor Carbonate content	0.00	Good		Poor Hard to reclaim	0.00
		Droughty	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Carbonate content	0.00
2002: Rock Outcrop-----	45	Not rated		Not rated		Not rated	
Upspring-----	30	Poor Droughty	0.00	Poor Depth to bedrock	0.00	Poor Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.00
Rubble Land-----	15	Not rated		Not rated		Not rated	
2004: Rock Outcrop-----	55	Not rated		Not rated		Not rated	
Zyplar-----	30	Poor Droughty	0.00	Poor Depth to bedrock	0.00	Poor Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88	Shrink-swell	0.87	Rock fragments	0.00
2005: Rock Outcrop-----	50	Not rated		Not rated		Not rated	
St. Thomas-----	20	Poor Droughty	0.00	Poor Depth to bedrock	0.00	Poor Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.08	Depth to bedrock	0.00
		Low content of organic matter	0.12	Cobble content	0.95	Slope	0.00
		Carbonate content	0.16			Carbonate content	0.16
		Cobble content	0.76				
St. Thomas-----	15	Poor Droughty	0.00	Poor Depth to bedrock	0.00	Poor Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.08	Depth to bedrock	0.00
		Low content of organic matter	0.12	Cobble content	0.95	Slope	0.00
		Carbonate content	0.16			Carbonate content	0.16
		Cobble content	0.73				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2010: Longjim-----	90	Poor Droughty Depth to cemented pan Too alkaline Low content of organic matter	0.00 0.00 0.00 0.12	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Slope	0.00 0.00 0.84
2011: Sanwell-----	45	Poor Sodium content Too alkaline Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Good		Poor Hard to reclaim Rock fragments Sodium content Salinity	0.00 0.00 0.00 0.50
Sanwell-----	40	Poor Sodium content Too alkaline Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Good		Poor Hard to reclaim Rock fragments Sodium content Salinity	0.00 0.00 0.00 0.50
2012: Zalda-----	45	Poor Droughty Depth to cemented pan Depth to bedrock Too alkaline Low content of organic matter	0.00 0.00 0.00 0.00 0.12	Poor Depth to bedrock Depth to cemented pan	0.00 0.00	Poor Depth to bedrock Depth to cemented pan Rock fragments	0.00 0.00 0.50
Greyeagle-----	30	Poor Droughty Depth to cemented pan Low content of organic matter	0.00 0.00 0.12	Poor Depth to cemented pan Slope	0.00 0.08	Poor Rock fragments Depth to cemented pan Slope	0.00 0.00 0.00
Upspring-----	15	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock	0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.37

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2013: Longjim-----	45	Poor Droughty Depth to cemented pan Too alkaline Low content of organic matter Carbonate content	0.00 0.00 0.00 0.12 0.68	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Slope	0.00 0.00 0.84
Yurm-----	40	Poor Droughty Depth to cemented pan Low content of organic matter Sodium content Carbonate content	0.00 0.00 0.12 0.40 0.80	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Sodium content Salinity Carbonate content Slope	0.00 0.00 0.40 0.50 0.80 0.84
2020: Weiser-----	70	Poor Carbonate content Low content of organic matter Droughty	0.00 0.12 0.68	Fair Cobble content	0.95	Poor Hard to reclaim Rock fragments Carbonate content	0.00 0.00 0.00
Canoto-----	25	Fair Low content of organic matter Droughty	0.18 0.35	Good		Poor Hard to reclaim Rock fragments	0.00 0.00
2021: Weiser-----	70	Poor Carbonate content Low content of organic matter Droughty	0.00 0.12 0.68	Fair Cobble content	0.95	Poor Hard to reclaim Rock fragments Carbonate content	0.00 0.00 0.00
Nickel-----	25	Fair Droughty Low content of organic matter	0.02 0.12	Good		Poor Hard to reclaim Rock fragments Slope	0.00 0.00 0.84
2023: Commski-----	35	Poor Droughty Carbonate content Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Fair Slope	0.68	Poor Hard to reclaim Rock fragments Carbonate content Slope Salinity Sodium content	0.00 0.00 0.00 0.00 0.50 0.78

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Commski-----	30	Poor Droughty Carbonate content Low content of organic matter Sodium content	 0.00 0.00 0.12 0.78	Good		Poor Hard to reclaim Rock fragments Carbonate content	 0.00 0.00 0.00
Sezna-----	20	Poor Droughty Depth to cemented pan Low content of organic matter Cobble content	 0.00 0.00 0.12 0.93	Poor Depth to cemented pan Shrink-swell	 0.00 0.87	Poor Rock fragments Depth to cemented pan	 0.00 0.00
2030: Corbilt-----	85	Poor Too alkaline Low content of organic matter Droughty Carbonate content	 0.00 0.12 0.96 0.97	Fair Depth to cemented pan	 0.95	Poor Rock fragments Hard to reclaim Carbonate content	 0.00 0.08 0.97
2031: Corbilt-----	60	Poor Too alkaline Low content of organic matter Droughty Carbonate content	 0.00 0.12 0.96 0.97	Fair Depth to cemented pan	 0.95	Poor Rock fragments Hard to reclaim Carbonate content	 0.00 0.08 0.97
Skelon-----	35	Poor Droughty Too alkaline Low content of organic matter Depth to cemented pan Carbonate content	 0.00 0.00 0.12 0.36 0.80	Poor Depth to cemented pan	 0.00	Poor Rock fragments Depth to cemented pan Carbonate content	 0.00 0.36 0.97
2040: Yurm-----	70	Poor Droughty Depth to cemented pan Low content of organic matter Sodium content Carbonate content	 0.00 0.00 0.12 0.40 0.80	Poor Depth to cemented pan	 0.00	Poor Rock fragments Depth to cemented pan Sodium content Salinity Carbonate content	 0.00 0.00 0.40 0.50 0.80

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Canoto-----	15	Fair		Good		Poor	
		Low content of organic matter	0.18			Hard to reclaim	0.00
		Droughty	0.35			Rock fragments	0.00
Yurm, moist-----	10	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12			Sodium content	0.40
		Sodium content	0.40			Salinity	0.50
		Carbonate content	0.80			Carbonate content	0.80
2050: Canoto-----	50	Fair		Good		Poor	
		Low content of organic matter	0.18			Hard to reclaim	0.00
		Droughty	0.35			Rock fragments	0.00
Naye-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Carbonate content	0.00			Carbonate content	0.00
		Low content of organic matter	0.12			Depth to cemented pan	0.16
		Depth to cemented pan	0.16				
2051: Yermo-----	35	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Woda-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Carbonate content	0.00
		Carbonate content	0.00			Depth to cemented pan	0.00
		Depth to cemented pan	0.00			Sodium content	0.40
		Too alkaline	0.00			Salinity	0.50
		Low content of organic matter	0.12			Rock fragments	0.88
		Sodium content	0.40				
		No water erosion limitation	0.99				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Nowoy-----	20	Poor Carbonate content Too alkaline Low content of organic matter Too clayey No water erosion limitation	0.00 0.00 0.12 0.98 0.99	Fair Shrink-swell	0.96	Poor Carbonate content Sodium content Salinity Too Clayey	0.00 0.40 0.50 0.57
2052: Canoto-----	85	Fair Low content of organic matter Droughty	0.18 0.35	Good		Poor Hard to reclaim Rock fragments	0.00 0.00
2053: Yermo-----	60	Fair Low content of organic matter Droughty Sodium content	0.12 0.35 0.78	Fair Slope Cobble content	0.08 0.97	Poor Rock fragments Slope Hard to reclaim Sodium content	0.00 0.00 0.00 0.78
Greyeagle-----	20	Poor Droughty Depth to cemented pan Low content of organic matter	0.00 0.00 0.12	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Slope	0.00 0.00 0.37
Arizo-----	15	Poor Too sandy Droughty Low content of organic matter Sodium content Stone content	0.00 0.00 0.12 0.78 0.95	Fair Stone content Cobble content	0.77 0.84	Poor Too sandy Hard to reclaim Rock fragments Sodium content Slope	0.00 0.00 0.00 0.78 0.84
2054: Yermo, hot-----	40	Fair Low content of organic matter Droughty Sodium content	0.12 0.35 0.78	Fair Cobble content	0.97	Poor Rock fragments Hard to reclaim Sodium content	0.00 0.00 0.78
Yermo-----	30	Fair Low content of organic matter Droughty Sodium content	0.12 0.35 0.78	Fair Cobble content	0.97	Poor Rock fragments Hard to reclaim Sodium content	0.00 0.00 0.78
Arizo-----	15	Poor Too sandy Droughty Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Fair Cobble content	0.92	Poor Too sandy Hard to reclaim Rock fragments Sodium content	0.00 0.00 0.00 0.78

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2055:							
Canoto-----	60	Fair		Good		Poor	
		Low content of organic matter	0.18			Hard to reclaim	0.00
		Droughty	0.35			Rock fragments	0.00
Canoto, MOIST-----	25	Fair		Good		Poor	
		Low content of organic matter	0.18			Hard to reclaim	0.00
		Droughty	0.35			Rock fragments	0.00
2057:							
Yermo-----	50	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Commski-----	40	Poor		Good		Poor	
		Droughty	0.00			Hard to reclaim	0.00
		Carbonate content	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Carbonate content	0.00
		Sodium content	0.78			Salinity	0.50
						Sodium content	0.78
2058:							
Canoto-----	50	Fair		Good		Poor	
		Low content of organic matter	0.18			Hard to reclaim	0.00
		Droughty	0.35			Rock fragments	0.00
Nickel-----	40	Fair		Good		Poor	
		Droughty	0.07			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
						Slope	0.96
2060:							
Purob-----	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Carbonate content	0.00			Carbonate content	0.00
		Low content of organic matter	0.12			Sodium content	0.78
		Sodium content	0.78				
Irongold-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Carbonate content	0.00			Rock fragments	0.12
		Depth to cemented pan	0.00			Carbonate content	0.80
		Low content of organic matter	0.12				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2061: Vace-----	95	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Depth to cemented pan	0.00
		Depth to cemented pan	0.00	Slope	0.92	Rock fragments	0.00
		Low content of organic matter	0.12			Slope	0.00
		Sodium content	0.40			Sodium content	0.40
2062: Purob-----	75	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Carbonate content	0.00
		Carbonate content	0.00	Slope	0.00	Depth to cemented pan	0.00
		Depth to cemented pan	0.00	Shrink-swell	0.87	Slope	0.00
		Low content of organic matter	0.88			Rock fragments	0.00
Niavi-----	10	Poor Droughty	0.00	Fair Cobble content	0.53	Poor Hard to reclaim	0.00
		Low content of organic matter	0.02			Rock fragments	0.00
		Too sandy	0.22			Too sandy	0.22
2064: Longjim, summer precip.-----	55	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Too alkaline	0.00			Slope	0.84
		Low content of organic matter	0.12				
		Carbonate content	0.68				
Purob-----	20	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Carbonate content	0.00
		Carbonate content	0.00	Shrink-swell	0.87	Depth to cemented pan	0.00
		Depth to cemented pan	0.00			Rock fragments	0.00
		Low content of organic matter	0.88			Slope	0.96
Niavi-----	10	Poor Droughty	0.00	Fair Cobble content	0.53	Poor Hard to reclaim	0.00
		Low content of organic matter	0.02			Rock fragments	0.00
		Too sandy	0.22			Too sandy	0.22

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2070: Shamock-----	90	Poor Too alkaline Low content of organic matter Droughty Depth to cemented pan	0.00 0.12 0.14 0.97	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan	0.00 0.97
2071: Shamock-----	45	Poor Too alkaline Low content of organic matter Droughty Depth to cemented pan	0.00 0.12 0.14 0.97	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan	0.00 0.97
Skelon-----	40	Poor Droughty Too alkaline Low content of organic matter Depth to cemented pan Sodium content	0.00 0.00 0.12 0.36 0.78	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Sodium content	0.00 0.36 0.78
2080: St. Thomas-----	35	Poor Droughty Depth to bedrock Low content of organic matter Carbonate content Cobble content	0.00 0.00 0.12 0.16 0.76	Poor Depth to bedrock Slope Cobble content	0.00 0.68 0.95	Poor Rock fragments Depth to bedrock Slope Carbonate content	0.00 0.00 0.00 0.16
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Commski-----	20	Poor Droughty Carbonate content Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Good		Poor Hard to reclaim Rock fragments Carbonate content Slope Salinity Sodium content	0.00 0.00 0.00 0.37 0.50 0.78

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2081: St. Thomas-----	45	Poor Droughty Depth to bedrock Low content of organic matter Carbonate content Cobble content	0.00 0.00 0.12 0.16 0.76	Poor Depth to bedrock Slope Cobble content	0.00 0.00 0.95	Poor Slope Rock fragments Depth to bedrock Carbonate content	0.00 0.00 0.00 0.16
Tecopa-----	25	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2090: Breko-----	55	Fair Low content of organic matter Droughty Carbonate content	0.12 0.58 0.92	Good		Poor Hard to reclaim Rock fragments	0.00 0.00
Veet-----	35	Poor Droughty Low content of organic matter	0.00 0.12	Fair No cobble limitation	0.99	Poor Hard to reclaim Rock fragments	0.00 0.00
2110: Pahrump-----	90	Poor Too alkaline Carbonate content Low content of organic matter Sodium content No water erosion limitation	0.00 0.01 0.12 0.40 0.99	Good		Poor Rock fragments Carbonate content Sodium content Slope Salinity	0.00 0.16 0.40 0.84 0.88
2121: Commski-----	60	Poor Droughty Carbonate content Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Good		Poor Hard to reclaim Rock fragments Carbonate content Salinity Sodium content	0.00 0.00 0.00 0.50 0.78
Arizo-----	30	Poor Too sandy Droughty Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Fair Cobble content	0.92	Poor Too sandy Hard to reclaim Rock fragments Sodium content	0.00 0.00 0.00 0.78

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2131: Upspring-----	55	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Shorim-----	20	Poor Droughty Too alkaline Depth to cemented pan Depth to bedrock Low content of organic matter	0.00 0.00 0.01 0.08 0.12	Poor Depth to bedrock Depth to cemented pan Slope	0.00 0.00 0.08	Poor Rock fragments Slope Depth to cemented pan Depth to bedrock	0.00 0.00 0.01 0.08
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2140: Jonnic-----	75	Poor Too clayey Too alkaline Droughty Cobble content Depth to cemented pan	0.00 0.00 0.00 0.99 0.99	Poor Depth to cemented pan Cobble content Shrink-swell	0.00 0.40 0.87	Poor Rock fragments Too Clayey Depth to cemented pan	0.00 0.00 0.99
Niavi-----	10	Poor Droughty Low content of organic matter Too sandy	0.00 0.02 0.22	Fair Cobble content	0.53	Poor Hard to reclaim Rock fragments Too sandy	0.00 0.00 0.22
2151: Arizo-----	40	Poor Too sandy Droughty Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Fair Cobble content	0.92	Poor Too sandy Hard to reclaim Rock fragments Sodium content	0.00 0.00 0.00 0.78
Bluepoint-----	35	Poor Too sandy Wind erosion Low content of organic matter Droughty Sodium content	0.00 0.00 0.12 0.74 0.78	Good		Poor Too sandy Sodium content	0.00 0.78
Dune Land-----	15	Not rated		Not rated		Not rated	

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2152: Arizo-----	85	Poor		Fair		Poor	
		Too sandy	0.00	Cobble content	0.92	Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2153: Arizo-----	35	Poor		Fair		Poor	
		Too sandy	0.00	Cobble content	0.92	Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
Corbilt-----	25	Poor		Fair		Poor	
		Too alkaline	0.00	Depth to cemented pan	0.58	Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.08
		Droughty	0.79			Carbonate content	0.97
		Carbonate content	0.97				
Commski-----	25	Poor		Good		Poor	
		Droughty	0.00			Hard to reclaim	0.00
		Carbonate content	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Carbonate content	0.00
		Sodium content	0.78			Salinity	0.50
						Sodium content	0.78
2161: Casaga-----	55	Poor		Fair		Poor	
		Salinity	0.00	Shrink-swell	0.99	Sodium content	0.00
		Sodium content	0.00			Salinity	0.00
		Too alkaline	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Too Clayey	0.57
		Carbonate content	0.80			Carbonate content	0.97
		Too clayey	0.98				
Nowoy-----	30	Poor		Fair		Poor	
		Carbonate content	0.00	Shrink-swell	0.96	Carbonate content	0.00
		Too alkaline	0.00			Sodium content	0.40
		Low content of organic matter	0.12			Salinity	0.50
		Too clayey	0.98			Too Clayey	0.57
		No water erosion limitation	0.99				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2162: Casaga-----	40	Poor		Fair		Poor	
		Sodium content	0.00	Shrink-swell	0.99	Hard to reclaim	0.00
		Too alkaline	0.00			Sodium content	0.00
		Low content of organic matter	0.12			Salinity	0.00
		Salinity	0.50			Rock fragments	0.28
		Carbonate content	0.80			Too Clayey	0.57
		Too clayey	0.98			Carbonate content	0.97
Panor-----	25	Poor		Fair		Poor	
		Salinity	0.00	Shrink-swell	0.87	Sodium content	0.00
		Sodium content	0.00			Salinity	0.00
		Too alkaline	0.00			Too Clayey	0.57
		Low content of organic matter	0.12			Hard to reclaim	0.68
		Water erosion	0.68				
		Too clayey	0.98				
Yermo-----	20	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
2171: Sanwell-----	60	Poor		Good		Poor	
		Sodium content	0.00			Hard to reclaim	0.00
		Too alkaline	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Sodium content	0.00
		Droughty	0.75			Salinity	0.50
Skelon-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Too alkaline	0.00			Depth to cemented pan	0.36
		Low content of organic matter	0.12			Sodium content	0.78
		Depth to cemented pan	0.36				
		Sodium content	0.78				
2172: Sanwell-----	60	Poor		Good		Poor	
		Sodium content	0.00			Hard to reclaim	0.00
		Too alkaline	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Sodium content	0.00
		Droughty	0.75			Salinity	0.50
Yermo-----	35	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2181: Skelon-----	30	Poor Droughty Too alkaline Low content of organic matter Depth to cemented pan Carbonate content	0.00 0.00 0.12 0.36 0.80	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Carbonate content	0.00 0.36 0.97
Yermo-----	30	Fair Low content of organic matter Droughty Sodium content	0.12 0.35 0.78	Fair Cobble content	0.97	Poor Rock fragments Hard to reclaim Sodium content	0.00 0.00 0.78
Pinez-----	25	Poor Droughty Low content of organic matter	0.00 0.12	Fair Depth to cemented pan Shrink-swell	0.01 0.99	Poor Hard to reclaim Rock fragments Hard to reclaim	0.00 0.00 0.46
2184: Skelon-----	60	Poor Droughty Too alkaline Low content of organic matter Depth to cemented pan Carbonate content	0.00 0.00 0.12 0.36 0.80	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Carbonate content	0.00 0.36 0.97
Bullfor-----	25	Poor Droughty Too alkaline Depth to cemented pan Low content of organic matter Too sandy	0.00 0.00 0.10 0.12 0.19	Poor Depth to cemented pan	0.00	Fair Depth to cemented pan Too sandy	0.10 0.19
2185: Skelon-----	50	Poor Droughty Too alkaline Low content of organic matter Depth to cemented pan Sodium content	0.00 0.00 0.12 0.36 0.78	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Sodium content Slope	0.00 0.36 0.78 0.84

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Yermo-----	30	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
						Slope	0.84
Ashmed-----	15	Poor		Good		Poor	
		Too alkaline	0.00			Hard to reclaim	0.00
		Salinity	0.00			Rock fragments	0.00
		Sodium content	0.00			Sodium content	0.00
		Low content of organic matter	0.12			Salinity	0.00
		Carbonate content	0.92			Carbonate content	0.92
		Droughty	0.94				
2186: Yermo-----	35	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Skelon-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Too alkaline	0.00			Depth to cemented pan	0.36
		Low content of organic matter	0.12			Carbonate content	0.97
		Depth to cemented pan	0.36				
		Carbonate content	0.80				
Pinez-----	15	Poor		Fair		Poor	
		Droughty	0.00	Depth to cemented pan	0.01	Hard to reclaim	0.00
		Low content of organic matter	0.12	Shrink-swell	0.99	Rock fragments	0.00
						Hard to reclaim	0.46
2191: Pinez-----	40	Poor		Fair		Poor	
		Droughty	0.00	Depth to cemented pan	0.01	Hard to reclaim	0.00
		Low content of organic matter	0.12	Shrink-swell	0.99	Rock fragments	0.00
						Hard to reclaim	0.46
Lealandic-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Too clayey	0.00	Shrink-swell	0.12	Too Clayey	0.00
		Depth to cemented pan	0.05			Depth to cemented pan	0.05
		Low content of organic matter	0.12			Sodium content	0.90
		Sodium content	0.90				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Arizo-----	20	Poor		Fair		Poor	
		Too sandy	0.00	Cobble content	0.92	Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2201: Corbilt-----	65	Poor		Fair		Poor	
		Too alkaline	0.00	Depth to cemented pan	0.95	Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.08
		Droughty	0.93			Carbonate content	0.97
		Carbonate content	0.97				
Arizo-----	30	Poor		Fair		Poor	
		Too sandy	0.00	Cobble content	0.92	Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2202: Corbilt-----	50	Poor		Fair		Poor	
		Too alkaline	0.00	Depth to cemented pan	0.95	Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.08
		Droughty	0.96			Carbonate content	0.97
		Carbonate content	0.97				
Migern-----	25	Fair		Good		Poor	
		Low content of organic matter	0.12			Rock fragments	0.00
		Too sandy	0.19			Too sandy	0.19
		Droughty	0.71			Hard to reclaim	0.50
Arizo-----	20	Poor		Fair		Poor	
		Too sandy	0.00	Cobble content	0.92	Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2204: Corbilt-----	40	Poor		Fair		Poor	
		Too alkaline	0.00	Depth to cemented pan	0.95	Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.08
		Droughty	0.96			Carbonate content	0.97
		Carbonate content	0.97				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Wodavar-----	25	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Carbonate content	0.00			Depth to cemented pan	0.00
		Depth to cemented pan	0.00			Carbonate content	0.16
		Too alkaline	0.00			Sodium content	0.78
		Low content of organic matter	0.12				
		Sodium content	0.78				
Sanwell-----	25	Poor Sodium content	0.00	Good		Poor Hard to reclaim	0.00
		Too alkaline	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Sodium content	0.00
		Droughty	0.75			Salinity	0.50
2212: Yermo-----	70	Fair Low content of organic matter	0.12	Fair Cobble content	0.97	Poor Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Bullfor-----	20	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Fair Depth to cemented pan	0.10
		Too alkaline	0.00			Too sandy	0.19
		Depth to cemented pan	0.10				
		Low content of organic matter	0.12				
		Too sandy	0.19				
2214: Yermo-----	65	Fair Low content of organic matter	0.12	Fair Cobble content	0.97	Poor Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Arizo-----	30	Poor Too sandy	0.00	Fair Cobble content	0.92	Poor Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2215: Yermo-----	60	Fair Low content of organic matter	0.12	Fair Cobble content	0.97	Poor Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Greyeagle-----	25	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12				
2216: Yermo-----	65	Fair Low content of organic matter	0.12	Fair Cobble content	0.97	Poor Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Arizo-----	20	Poor Too sandy	0.00	Fair Cobble content	0.92	Poor Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2218: Sanwell-----	50	Poor Sodium content	0.00	Good		Poor Hard to reclaim	0.00
		Too alkaline	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Sodium content	0.00
		Droughty	0.75			Salinity	0.50
Commski-----	45	Poor Droughty	0.00	Good		Poor Hard to reclaim	0.00
		Carbonate content	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Carbonate content	0.00
		Sodium content	0.40			Sodium content	0.40
						Salinity	0.50
2220: Canoto-----	65	Fair Low content of organic matter	0.18	Good		Poor Hard to reclaim	0.00
		Droughty	0.75			Rock fragments	0.00
Arizo-----	20	Poor Too sandy	0.00	Fair Cobble content	0.92	Poor Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2221: Sanwell-----	60	Poor Sodium content	0.00	Good		Poor Hard to reclaim	0.00
		Too alkaline	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Sodium content	0.00
		Droughty	0.75			Salinity	0.50

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Greyeagle-----	30	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12				
2222: Niavi-----	55	Poor Droughty	0.00	Fair Cobble content	0.53	Poor Hard to reclaim	0.00
		Low content of organic matter	0.02			Rock fragments	0.00
		Too sandy	0.22			Too sandy	0.22
Jonnic-----	35	Poor Too clayey	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Too alkaline	0.00	Cobble content	0.40	Too Clayey	0.00
		Droughty	0.00	Shrink-swell	0.87	Depth to cemented pan	0.99
		Cobble content	0.99				
		Depth to cemented pan	0.99				
2230: Yermo-----	60	Fair Low content of organic matter	0.12	Fair Cobble content	0.97	Poor Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Skelon-----	25	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Too alkaline	0.00			Depth to cemented pan	0.36
		Low content of organic matter	0.12			Carbonate content	0.97
		Depth to cemented pan	0.36				
		Carbonate content	0.80				
2233: Yermo-----	35	Fair Low content of organic matter	0.12	Fair Cobble content	0.97	Poor Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Skelon-----	25	Poor Droughty Too alkaline Low content of organic matter Depth to cemented pan Carbonate content	 0.00 0.00 0.12 0.36 0.80	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Carbonate content	0.00 0.36 0.97
Bluepoint-----	25	Poor Too sandy Wind erosion Low content of organic matter Droughty Sodium content	 0.00 0.00 0.12 0.74 0.78	Good		Poor Too sandy Slope Sodium content	0.00 0.37 0.78
2250: Tokoper-----	40	Poor Droughty Depth to cemented pan Depth to bedrock Low content of organic matter Sodium content Cobble content	 0.00 0.00 0.00 0.12 0.90 0.97	Poor Depth to bedrock Depth to cemented pan No cobble limitation	0.00 0.00 0.99	Poor Rock fragments Depth to bedrock Depth to cemented pan Slope	0.00 0.00 0.00 0.37
Upspring-----	30	Poor Droughty Depth to bedrock Low content of organic matter	 0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2251: Tokoper-----	35	Poor Droughty Depth to cemented pan Depth to bedrock Low content of organic matter Sodium content Cobble content	 0.00 0.00 0.00 0.12 0.90 0.97	Poor Depth to bedrock Depth to cemented pan No cobble limitation	0.00 0.00 0.99	Poor Rock fragments Depth to bedrock Depth to cemented pan Slope	0.00 0.00 0.00 0.37
Downeyville-----	30	Poor Droughty Depth to bedrock Low content of organic matter	 0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.68	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Pintwater-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12	Cobble content	0.58	Slope	0.00
		Cobble content	0.80	Stone content	0.99		
		Stone content	0.99				
2252: Tokoper-----	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	No cobble limitation	0.99	Depth to cemented pan	0.00
		Low content of organic matter	0.12			Slope	0.37
		Sodium content	0.90				
		Cobble content	0.97				
Blacktop-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12	Stone content	0.77	Slope	0.00
		Stone content	0.77				
2253: Tokoper-----	60	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	No cobble limitation	0.99	Depth to cemented pan	0.00
		Low content of organic matter	0.12			Slope	0.84
		Sodium content	0.90				
		Cobble content	0.97				
Ardivey-----	25	Poor		Fair		Poor	
		Too alkaline	0.00	Cobble content	0.63	Hard to reclaim	0.00
		Droughty	0.02			Rock fragments	0.00
		Too sandy	0.07			Too sandy	0.07
		Low content of organic matter	0.12			Sodium content	0.78
		Sodium content	0.78			Carbonate content	0.92
		Carbonate content	0.92				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2254: Tokoper-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.08	Depth to cemented pan	0.00
		Low content of organic matter	0.12	No cobble limitation	0.99	Slope	0.00
		Sodium content	0.90				
		Cobble content	0.97				
Downeyville-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.37
Espint-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Too clayey	0.00			Too Clayey	0.00
		Low content of organic matter	0.88			Rock fragments	0.00
2260: Greyeagle-----	85	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12				
2261: Longjim-----	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Too alkaline	0.00			Slope	0.37
		Low content of organic matter	0.12				
Yermo-----	25	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
						Slope	0.96

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Dedas-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.18			Slope	0.84
		Carbonate content	0.97			Carbonate content	0.97
2263: Greyeagle-----	65	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12			Slope	0.84
Sanwell-----	15	Poor		Good		Poor	
		Sodium content	0.00			Hard to reclaim	0.00
		Too alkaline	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Sodium content	0.00
		Droughty	0.75			Salinity	0.50
Yermo-----	15	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
2266: Greyeagle-----	95	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Slope	0.00	Depth to cemented pan	0.00
		Low content of organic matter	0.12			Slope	0.00
2267: Greyeagle-----	75	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Skelon-----	20	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Too alkaline	0.00			Depth to cemented pan	0.36
		Low content of organic matter	0.12			Sodium content	0.78
		Depth to cemented pan	0.36				
		Sodium content	0.78				
2268: Greyeagle-----	70	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12				
Arizo-----	25	Poor Too sandy	0.00	Fair Cobble content	0.92	Poor Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2269: Greyeagle-----	45	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12				
Yermo-----	30	Fair Low content of organic matter	0.12	Fair Cobble content	0.97	Poor Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Strozi-----	20	Fair Droughty	0.01	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Low content of organic matter	0.12			Sodium content	0.40
		Sodium content	0.40			Salinity	0.50
		Depth to cemented pan	0.71			Depth to cemented pan	0.71
2270: Bluepoint-----	85	Poor Too sandy	0.00	Fair Slope	0.92	Poor Too sandy	0.00
		Wind erosion	0.00			Slope	0.00
		Low content of organic matter	0.12			Sodium content	0.78
		Droughty	0.74				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2271: Kawich-----	40	Poor Too sandy Wind erosion Too alkaline Droughty Low content of organic matter Sodium content	0.00 0.00 0.00 0.09 0.12 0.78	Good		Poor Too sandy Salinity Sodium content	0.00 0.50 0.78
Corbilt-----	25	Poor Too alkaline Low content of organic matter Droughty Carbonate content	0.00 0.12 0.96 0.97	Fair Depth to cemented pan	0.95	Poor Rock fragments Hard to reclaim Carbonate content	0.00 0.08 0.97
Wanomie-----	20	Poor Sodium content Droughty Low content of organic matter Salinity Depth to cemented pan	0.00 0.09 0.12 0.50 0.54	Poor Depth to cemented pan	0.00	Poor Sodium content Depth to cemented pan	0.00 0.54
2280: Shorim-----	60	Poor Droughty Too alkaline Depth to cemented pan Depth to bedrock Low content of organic matter	0.00 0.00 0.01 0.10 0.12	Poor Depth to bedrock Depth to cemented pan	0.00 0.00	Poor Rock fragments Depth to cemented pan Depth to bedrock Slope	0.00 0.01 0.10 0.96
Zalda-----	15	Poor Droughty Depth to cemented pan Depth to bedrock Too alkaline Low content of organic matter	0.00 0.00 0.00 0.00 0.12	Poor Depth to bedrock Depth to cemented pan Slope	0.00 0.00 0.08	Poor Depth to bedrock Depth to cemented pan Slope Rock fragments	0.00 0.00 0.00 0.50
Upspring-----	15	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.08	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2281: Shorim-----	80	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Too alkaline	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.01
		Depth to cemented pan	0.01			Depth to bedrock	0.10
		Depth to bedrock	0.10			Slope	0.37
		Low content of organic matter	0.12				
Yermo-----	15	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
2282: Dedas-----	70	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.92	Depth to cemented pan	0.00
		Low content of organic matter	0.18			Slope	0.00
		Carbonate content	0.97			Carbonate content	0.97
Orwash-----	20	Fair		Good		Poor	
		Droughty	0.01			Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.18
		Too sandy	0.31			Too sandy	0.31
		Sodium content	0.40			Sodium content	0.40
						Slope	0.84
2290: Gabbvally-----	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
						Slope	0.00
Upspring-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.00
Rubble Land-----	15	Not rated		Not rated		Not rated	
2291: Gabbvally-----	70	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
						Slope	0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2301: Tecopa-----	50	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Haleburu-----	20	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2302: Tecopa-----	35	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Upspring-----	25	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.92	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
2304: Tecopa-----	50	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Zibate-----	25	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope Shrink-swell	0.00 0.00 0.87	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2305: Tecopa-----	70	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2310: Nowoy-----	45	Poor Carbonate content Too alkaline Low content of organic matter Too clayey No water erosion limitation	0.00 0.00 0.12 0.98 0.99	Fair Shrink-swell	0.96	Poor Carbonate content Sodium content Salinity Too Clayey	0.00 0.40 0.50 0.57
Commski-----	40	Poor Droughty Carbonate content Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Good		Poor Hard to reclaim Rock fragments Carbonate content Salinity Sodium content	0.00 0.00 0.00 0.50 0.78
2312: Commski-----	55	Poor Droughty Carbonate content Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Good		Poor Hard to reclaim Rock fragments Carbonate content Salinity Sodium content	0.00 0.00 0.00 0.50 0.78
Tanazza-----	30	Poor Carbonate content Low content of organic matter Water erosion	0.00 0.12 0.68	Fair Shrink-swell	0.99	Poor Carbonate content	0.00
2320: Wahguyhe-----	40	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Rock Outcrop-----	30	Not rated		Not rated		Not rated	
Gabbvally-----	20	Poor Droughty Depth to bedrock	0.00 0.00	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2341: Naye-----	85	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Carbonate content	0.00			Carbonate content	0.00
		Low content of organic matter	0.12			Depth to cemented pan	0.16
		Depth to cemented pan	0.16				
2372: Zalda-----	35	Poor Droughty	0.00	Poor Depth to bedrock	0.00	Poor Depth to bedrock	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Depth to bedrock	0.00	Slope	0.08	Slope	0.00
		Too alkaline	0.00			Rock fragments	0.50
		Low content of organic matter	0.12				
Bluepoint-----	35	Poor Too sandy	0.00	Good		Poor Too sandy	0.00
		Wind erosion	0.00			Sodium content	0.78
		Low content of organic matter	0.12			Slope	0.96
		Droughty	0.74				
		Sodium content	0.78				
Rock Outcrop-----	20	Not rated		Not rated		Not rated	
2373: Zalda-----	40	Poor Droughty	0.00	Poor Depth to bedrock	0.00	Poor Depth to bedrock	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.00
		Depth to bedrock	0.00	Slope	0.68	Slope	0.00
		Too alkaline	0.00			Rock fragments	0.50
		Low content of organic matter	0.12				
Rubble Land-----	25	Not rated		Not rated		Not rated	
Skelon-----	20	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Too alkaline	0.00			Depth to cemented pan	0.36
		Low content of organic matter	0.12			Slope	0.37
		Depth to cemented pan	0.36			Sodium content	0.78
		Sodium content	0.78				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2381: Armpup-----	55	Poor Too alkaline Salinity Sodium content Too clayey Low content of organic matter Carbonate content	0.00 0.00 0.00 0.00 0.12 0.92	Fair Shrink-swell Depth to bedrock	0.88 0.92	Poor Hard to reclaim Rock fragments Sodium content Salinity Too Clayey Carbonate content	0.00 0.00 0.00 0.00 0.00 0.92
Ashmed-----	30	Poor Too alkaline Salinity Sodium content Low content of organic matter Carbonate content Droughty	0.00 0.00 0.00 0.12 0.92 0.94	Good		Poor Hard to reclaim Rock fragments Sodium content Salinity Carbonate content	0.00 0.00 0.00 0.00 0.92
2391: Commski-----	65	Poor Droughty Carbonate content Low content of organic matter Sodium content	0.00 0.00 0.12 0.40	Poor Slope	0.00	Poor Hard to reclaim Rock fragments Carbonate content Slope Sodium content Salinity	0.00 0.00 0.00 0.00 0.40 0.50
Ashmed-----	25	Poor Too alkaline Salinity Sodium content Low content of organic matter Droughty Carbonate content	0.00 0.00 0.00 0.12 0.85 0.92	Good		Poor Hard to reclaim Rock fragments Sodium content Salinity Slope Carbonate content	0.00 0.00 0.00 0.00 0.84 0.92
2392: Commski-----	65	Poor Droughty Carbonate content Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Poor Slope	0.00	Poor Hard to reclaim Rock fragments Carbonate content Slope Salinity Sodium content	0.00 0.00 0.00 0.00 0.50 0.78
Ashmed-----	25	Poor Too alkaline Salinity Sodium content Low content of organic matter Droughty Carbonate content	0.00 0.00 0.00 0.12 0.85 0.92	Good		Poor Hard to reclaim Rock fragments Sodium content Salinity Slope Carbonate content	0.00 0.00 0.00 0.00 0.84 0.92

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2393: Commski-----	70	Poor Droughty Carbonate content Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Good		Poor Hard to reclaim Rock fragments Carbonate content Salinity Sodium content	0.00 0.00 0.00 0.50 0.78
Yermo-----	25	Fair Low content of organic matter Droughty Sodium content	0.12 0.35 0.78	Fair Cobble content	0.97	Poor Rock fragments Hard to reclaim Sodium content	0.00 0.00 0.78
2400: Mobl-----	65	Poor Salinity Sodium content Too sandy Too alkaline Low content of organic matter Droughty	0.00 0.00 0.00 0.00 0.12 0.41	Good		Poor Rock fragments Sodium content Salinity Hard to reclaim Too sandy	0.00 0.00 0.00 0.00 0.00
Scottcas-----	20	Poor Droughty Too alkaline Too sandy Low content of organic matter Sodium content	0.00 0.00 0.06 0.12 0.78	Good		Poor Hard to reclaim Rock fragments Too sandy Salinity Sodium content	0.00 0.00 0.06 0.50 0.90
2401: Skelon-----	55	Poor Droughty Too alkaline Low content of organic matter Depth to cemented pan Sodium content	0.00 0.00 0.12 0.36 0.78	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Sodium content Slope	0.00 0.36 0.78 0.84
Bacho-----	30	Poor Droughty Depth to cemented pan Too clayey Low content of organic matter	0.00 0.00 0.00 0.00 0.12	Poor Depth to cemented pan Shrink-swell	0.00 0.87	Poor Rock fragments Depth to cemented pan Too Clayey	0.00 0.00 0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2421: Orwash-----	50	Fair		Good		Poor	
		Droughty	0.01			Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.18
		Too sandy	0.31			Too sandy	0.31
		Sodium content	0.40			Sodium content	0.40
Wilst-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.79
		Depth to bedrock	0.79				
Agon-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Depth to cemented pan	0.00	Too sandy	0.22
		Too sandy	0.22			Depth to cemented pan	0.71
		Depth to cemented pan	0.71			Depth to bedrock	0.79
		Depth to bedrock	0.79				
2422: Orwash-----	45	Fair		Good		Poor	
		Droughty	0.01			Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.18
		Too sandy	0.31			Too sandy	0.31
		Sodium content	0.40			Sodium content	0.40
Louderback-----	25	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Sodium content	0.00
		Too alkaline	0.00			Hard to reclaim	0.18
		Salinity	0.00				
		Sodium content	0.00				
		Droughty	0.05				
		Low content of organic matter	0.88				
Arizo-----	15	Poor		Fair		Poor	
		Too sandy	0.00	Cobble content	0.92	Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2423: Orwash-----	40	Fair		Good		Poor	
		Droughty	0.01			Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.18
		Too sandy	0.31			Too sandy	0.31
		Sodium content	0.40			Sodium content	0.40
						Slope	0.84

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Greyeagle-----	30	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12				
Wanomie-----	20	Poor Sodium content	0.00	Poor Depth to cemented pan	0.00	Poor Sodium content	0.00
		Droughty	0.06			Depth to cemented pan	0.54
		Low content of organic matter	0.12				
		Salinity	0.50				
		Depth to cemented pan	0.54				
2425: Orwash-----	45	Fair Droughty	0.01	Good		Poor Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.18
		Too sandy	0.31			Too sandy	0.31
		Sodium content	0.40			Sodium content	0.40
Yermo-----	25	Fair Low content of organic matter	0.12	Fair Cobble content	0.97	Poor Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Arizo-----	20	Poor Too sandy	0.00	Fair Cobble content	0.92	Poor Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2431: Zibate-----	55	Poor Droughty	0.00	Poor Depth to bedrock	0.00	Poor Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12	Shrink-swell	0.87	Slope	0.00
Zyplar-----	15	Poor Droughty	0.00	Poor Depth to bedrock	0.00	Poor Depth to bedrock	0.00
		Depth to bedrock	0.00	Shrink-swell	0.87	Rock fragments	0.00
		Low content of organic matter	0.88			Slope	0.37

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Dedas-----	15	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to cemented pan	0.00
		Low content of organic matter	0.18			Slope	0.00
		Carbonate content	0.97			Carbonate content	0.97
2432: Zibate-----	85	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Shrink-swell	0.87	Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.37
2434: Cruzspring-----	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.18	Depth to bedrock	0.00
		Low content of organic matter	0.08			Slope	0.00
Schader-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.08	Slope	0.00	Slope	0.00
		Depth to bedrock	0.35			Depth to bedrock	0.35
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2436: Zibate-----	70	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12	Shrink-swell	0.87	Slope	0.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2437: Cruzspring-----	70	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.08			Slope	0.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2441: Lewdlac-----	50	Poor Droughty Depth to cemented pan Low content of organic matter Carbonate content No water erosion limitation	0.00 0.00 0.12 0.92 0.99	Poor Depth to cemented pan	0.00	Poor Depth to cemented pan Rock fragments Carbonate content	0.00 0.72 0.92
Sanwell-----	35	Poor Sodium content Too alkaline Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Good		Poor Hard to reclaim Rock fragments Sodium content Salinity	0.00 0.00 0.00 0.50
2451: Sanwell-----	40	Poor Sodium content Too alkaline Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Good		Poor Hard to reclaim Rock fragments Sodium content Salinity	0.00 0.00 0.00 0.50
Sanwell-----	25	Poor Sodium content Too alkaline Low content of organic matter Droughty	0.00 0.00 0.12 0.75	Good		Poor Hard to reclaim Rock fragments Sodium content Salinity	0.00 0.00 0.00 0.50
Yermo-----	20	Fair Low content of organic matter Droughty Sodium content	0.12 0.35 0.78	Fair Cobble content	0.97	Poor Rock fragments Hard to reclaim Sodium content	0.00 0.00 0.78
2461: Nowoy-----	60	Poor Carbonate content Too alkaline Low content of organic matter Too clayey No water erosion limitation	0.00 0.00 0.12 0.98 0.99	Fair Shrink-swell	0.96	Poor Carbonate content Sodium content Salinity Too Clayey	0.00 0.40 0.50 0.57

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Skelon-----	25	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Too alkaline	0.00			Depth to cemented pan	0.36
		Low content of organic matter	0.12			Carbonate content	0.97
		Depth to cemented pan	0.36				
		Carbonate content	0.80				
2471: Lewdlac-----	70	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Depth to cemented pan	0.00
		Depth to cemented pan	0.00			Rock fragments	0.72
		Low content of organic matter	0.12			Carbonate content	0.92
		Carbonate content	0.92				
		No water erosion limitation	0.99				
Yermo-----	15	Fair Low content of organic matter	0.12	Fair Cobble content	0.97	Poor Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
2481: Bacho-----	70	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00	Shrink-swell	0.87	Depth to cemented pan	0.00
		Too clayey	0.00			Too Clayey	0.00
		Low content of organic matter	0.12				
Greyeagle-----	20	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00	Slope	0.00	Depth to cemented pan	0.00
		Low content of organic matter	0.12			Slope	0.00
2482: Bacho-----	55	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00	Shrink-swell	0.87	Depth to cemented pan	0.00
		Too clayey	0.00			Too Clayey	0.00
		Low content of organic matter	0.12			Slope	0.84

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Yermo-----	30	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
2491: Downeyville-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.00
Blacktop-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Stone content	0.77	Depth to bedrock	0.00
		Stone content	0.77				
Tokoper-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to cemented pan	0.00	Slope	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Depth to cemented pan	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12	No cobble limitation	0.99	Depth to cemented pan	0.00
		Sodium content	0.90				
		Cobble content	0.97				
2492: Downeyville-----	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.08	Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.00
Silverbow-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Slope	0.68	Depth to cemented pan	0.00
		Low content of organic matter	0.12			Slope	0.00
		Sodium content	0.78			Sodium content	0.78
		No cobble limitation	0.99				
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2493: Downeyville-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.08	Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Tognoni-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Too clayey	0.00	Cobble content	0.59	Slope	0.00
		Low content of organic matter	0.12	Shrink-swell	0.87	Too Clayey	0.00
		Cobble content	0.27				
Stonell-----	25	Poor		Good		Poor	
		Too alkaline	0.00			Hard to reclaim	0.00
		Droughty	0.02			Rock fragments	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.12			Salinity	0.50
		Salinity	0.50			Carbonate content	0.80
		Carbonate content	0.80			Sodium content	0.90
		Sodium content	0.90				
2494: Downeyville-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.00
Vindicator-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.96
Stewval-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.88			Slope	0.00
2495: Downeyville-----	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.00
Gabbvally-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
						Slope	0.00
2496: Downeyville-----	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Pintwater-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Cobble content	0.91	Depth to bedrock	0.00
		Stone content	0.99	Stone content	0.99		
		No cobble limitation	0.99				
Upspring-----	15	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.00
2500: Commski-----	70	Poor		Fair		Poor	
		Droughty	0.00	Slope	0.92	Hard to reclaim	0.00
		Carbonate content	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Carbonate content	0.00
		Sodium content	0.78			Slope	0.00
						Salinity	0.50
						Sodium content	0.78
Greyeagle-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Slope	0.00	Depth to cemented pan	0.00
		Low content of organic matter	0.12			Slope	0.00
2501: Wanomie-----	60	Poor		Poor		Poor	
		Sodium content	0.00	Depth to cemented pan	0.00	Sodium content	0.00
		Droughty	0.09			Depth to cemented pan	0.54
		Low content of organic matter	0.12				
		Salinity	0.50				
		Depth to cemented pan	0.54				
Corbilt-----	25	Poor		Fair		Poor	
		Too alkaline	0.00	Depth to cemented pan	0.95	Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.08
		Droughty	0.96			Carbonate content	0.97
		Carbonate content	0.97				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2510: Fuegosta-----	40	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00	Shrink-swell	0.85	Depth to cemented pan	0.00
		Too clayey	0.00			Too Clayey	0.00
		Too alkaline	0.00				
		Low content of organic matter	0.12				
		Sodium content	0.78				
		Carbonate content	0.97				
Tomel-----	25	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Too alkaline	0.00			Sodium content	0.78
		Low content of organic matter	0.12				
		Sodium content	0.78				
		Salinity	0.88				
Izo-----	20	Poor Too sandy	0.00	Good		Poor Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
2511: Fuegosta-----	45	Poor Droughty	0.00	Poor Depth to cemented pan	0.00	Poor Rock fragments	0.00
		Depth to cemented pan	0.00	Shrink-swell	0.85	Depth to cemented pan	0.00
		Too clayey	0.00			Too Clayey	0.00
		Too alkaline	0.00				
		Low content of organic matter	0.12				
		Sodium content	0.78				
		Carbonate content	0.97				
Wardenot-----	30	Fair Too sandy	0.02	Fair Cobble content	0.77	Poor Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Droughty	0.18			Too sandy	0.02
		Sodium content	0.78			Sodium content	0.78
Izo-----	20	Poor Too sandy	0.00	Good		Poor Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2520: Vigus-----	40	Poor Sodium content Too alkaline Low content of organic matter Too sandy Droughty	 0.00 0.00 0.12 0.50 0.91	Good		Poor Sodium content Rock fragments Too sandy Hard to reclaim	 0.00 0.00 0.50 0.92
Fuegosta-----	25	Poor Droughty Depth to cemented pan Too clayey Too alkaline Low content of organic matter Sodium content Carbonate content	 0.00 0.00 0.00 0.00 0.12 0.78 0.97	Poor Depth to cemented pan Shrink-swell	 0.00 0.85	Poor Rock fragments Depth to cemented pan Too Clayey	 0.00 0.00 0.00
Izo-----	25	Poor Too sandy Droughty Low content of organic matter	 0.00 0.00 0.12	Good		Poor Too sandy Hard to reclaim Rock fragments	 0.00 0.00 0.00
2521: Vigus-----	35	Poor Sodium content Too alkaline Low content of organic matter Too sandy Droughty	 0.00 0.00 0.12 0.50 0.91	Good		Poor Sodium content Rock fragments Too sandy Hard to reclaim	 0.00 0.00 0.50 0.92
Wardenot-----	30	Fair Too sandy Low content of organic matter Droughty Sodium content	 0.02 0.12 0.18 0.78	Fair Cobble content	 0.77	Poor Hard to reclaim Rock fragments Too sandy Sodium content	 0.00 0.00 0.02 0.78
Fuegosta-----	25	Poor Droughty Depth to cemented pan Too clayey Too alkaline Low content of organic matter Sodium content Carbonate content	 0.00 0.00 0.00 0.00 0.12 0.78 0.97	Poor Depth to cemented pan Shrink-swell	 0.00 0.85	Poor Rock fragments Depth to cemented pan Too Clayey	 0.00 0.00 0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2531: Laxal-----	30	Poor Too alkaline Droughty Low content of organic matter Salinity Carbonate content	 0.00 0.09 0.12 0.88 0.97	Good		Poor Hard to reclaim Rock fragments Salinity Carbonate content	 0.00 0.00 0.00 0.97
Stonell-----	30	Poor Too alkaline Droughty Too sandy Low content of organic matter Salinity Carbonate content Sodium content	 0.00 0.02 0.02 0.12 0.50 0.80 0.90	Good		Poor Hard to reclaim Rock fragments Too sandy Salinity Carbonate content Sodium content	 0.00 0.00 0.02 0.50 0.80 0.90
Unsel-----	25	Poor Too sandy Too alkaline Low content of organic matter Droughty Sodium content	 0.00 0.00 0.12 0.19 0.78	Good		Poor Too sandy Hard to reclaim Rock fragments Sodium content Salinity	 0.00 0.00 0.00 0.00 0.50
2532: Laxal-----	50	Poor Too alkaline Droughty Low content of organic matter Salinity Carbonate content	 0.00 0.09 0.12 0.88 0.97	Good		Poor Hard to reclaim Rock fragments Salinity Carbonate content	 0.00 0.00 0.00 0.97
Fang-----	35	Fair Low content of organic matter Sodium content No water erosion limitation	 0.12 0.90 0.99	Good		Fair Sodium content Rock fragments Hard to reclaim	 0.90 0.97 0.98
2540: Lidan-----	65	Poor Droughty Low content of organic matter Too clayey Depth to cemented pan	 0.00 0.12 0.50 0.54	Poor Depth to cemented pan Shrink-swell	0.00 0.87	Poor Rock fragments Too Clayey Slope Depth to cemented pan	 0.00 0.29 0.37 0.54

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Izo-----	20	Poor Too sandy Droughty Low content of organic matter	0.00 0.00 0.12	Good		Poor Too sandy Hard to reclaim Rock fragments Slope	0.00 0.00 0.00 0.84
2550: Stonewall-----	60	Fair Droughty Low content of organic matter Sodium content	0.06 0.12 0.40	Good		Poor Hard to reclaim Rock fragments Slope Sodium content Salinity	0.00 0.00 0.37 0.40 0.50
Izo-----	15	Poor Too sandy Droughty Low content of organic matter	0.00 0.00 0.12	Good		Poor Too sandy Hard to reclaim Rock fragments	0.00 0.00 0.00
Lidan-----	15	Poor Droughty Low content of organic matter Too clayey Depth to cemented pan	0.00 0.12 0.50 0.54	Poor Depth to cemented pan Shrink-swell	0.00 0.87	Poor Rock fragments Too Clayey Slope Depth to cemented pan	0.00 0.29 0.37 0.54
2570: Stargo-----	70	Poor Too alkaline Low content of organic matter Too sandy Sodium content No water erosion limitation	0.00 0.12 0.56 0.90 0.99	Good		Fair Rock fragments Too sandy Sodium content	0.50 0.56 0.90
Playas-----	20	Not rated		Not rated		Not rated	
2580: Wardenot-----	50	Fair Too sandy Droughty Low content of organic matter Sodium content	0.02 0.08 0.12 0.78	Fair Cobble content	0.84	Poor Hard to reclaim Rock fragments Too sandy Sodium content	0.00 0.00 0.02 0.78
Izo-----	35	Poor Too sandy Droughty Low content of organic matter	0.00 0.00 0.12	Good		Poor Too sandy Hard to reclaim Rock fragments	0.00 0.00 0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2601: Cobatus-----	65	Poor Too alkaline Sodium content Low content of organic matter Salinity	0.00 0.00 0.12 0.50	Fair Shrink-swell	0.87	Poor Sodium content Salinity	0.00 0.00
Kawich-----	25	Poor Too sandy Wind erosion Too alkaline Droughty Low content of organic matter Sodium content	0.00 0.00 0.00 0.09 0.12 0.78	Good		Poor Too sandy Salinity Sodium content	0.00 0.50 0.78
2611: Corbilt-----	85	Poor Too alkaline Low content of organic matter Droughty Carbonate content	0.00 0.12 0.93 0.97	Fair Depth to cemented pan	0.95	Poor Rock fragments Hard to reclaim Carbonate content	0.00 0.08 0.97
2630: Wechech-----	55	Poor Droughty Depth to cemented pan Carbonate content Low content of organic matter	0.00 0.00 0.08 0.12	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Carbonate content Slope	0.00 0.00 0.08 0.96
Commski-----	40	Poor Droughty Carbonate content Low content of organic matter Sodium content	0.00 0.00 0.12 0.78	Good		Poor Hard to reclaim Rock fragments Carbonate content Salinity Sodium content Slope	0.00 0.00 0.00 0.50 0.78 0.96
2640: Downeyville-----	35	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Advokay-----	35	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock	0.00	Poor Depth to bedrock Rock fragments Slope	0.00 0.00 0.37

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Pintwater-----	15	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12	Cobble content	0.91	Slope	0.00
		Stone content	0.99	Stone content	0.99		
		No cobble limitation	0.99				
2641: Advokay-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Slope	0.37
Ardivey-----	30	Poor		Fair		Poor	
		Too alkaline	0.00	Cobble content	0.65	Hard to reclaim	0.00
		Droughty	0.02			Rock fragments	0.00
		Too sandy	0.07			Too sandy	0.07
		Low content of organic matter	0.12			Sodium content	0.78
		Sodium content	0.78			Carbonate content	0.92
		Carbonate content	0.92				
Leo-----	20	Fair		Good		Poor	
		Droughty	0.01			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Too sandy	0.54			Too sandy	0.54
2642: Advokay-----	65	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00			Rock fragments	0.00
		Low content of organic matter	0.12			Slope	0.84
Blacktop-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.08	Depth to bedrock	0.00
		Low content of organic matter	0.12	Stone content	0.77	Slope	0.00
		Stone content	0.77				
2650: Luning-----	40	Poor		Good		Fair	
		Wind erosion	0.00			Rock fragments	0.03
		Droughty	0.00			Sodium content	0.40
		Low content of organic matter	0.12			Too sandy	0.50
		Sodium content	0.40			Hard to reclaim	0.98
		Too sandy	0.50				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Wardenot-----	30	Fair		Fair		Poor	
		Too sandy	0.02	Cobble content	0.77	Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Droughty	0.18			Too sandy	0.02
		Sodium content	0.78			Sodium content	0.78
Izo-----	20	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
2660: Stonell-----	35	Poor		Good		Poor	
		Too alkaline	0.00			Hard to reclaim	0.00
		Droughty	0.02			Rock fragments	0.00
		Too sandy	0.02			Too sandy	0.02
		Low content of organic matter	0.12			Salinity	0.50
		Salinity	0.50			Carbonate content	0.80
		Carbonate content	0.80			Sodium content	0.90
		Sodium content	0.90				
Wardenot-----	30	Fair		Fair		Poor	
		Too sandy	0.02	Cobble content	0.84	Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Droughty	0.16			Too sandy	0.02
		Sodium content	0.78			Sodium content	0.78
Izo-----	20	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
2670: Ardivey-----	65	Poor		Fair		Poor	
		Too alkaline	0.00	Cobble content	0.65	Hard to reclaim	0.00
		Droughty	0.02			Rock fragments	0.00
		Too sandy	0.07			Too sandy	0.07
		Low content of organic matter	0.12			Sodium content	0.78
		Sodium content	0.78			Carbonate content	0.92
		Carbonate content	0.92				
Izo-----	20	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2671: Ardivey-----	45	Poor Too alkaline Droughty Too sandy Low content of organic matter Sodium content Carbonate content	0.00 0.02 0.07 0.12 0.78 0.92	Fair Cobble content	0.65	Poor Hard to reclaim Rock fragments Too sandy Sodium content Carbonate content	0.00 0.00 0.07 0.78 0.92
Stonell-----	20	Poor Too alkaline Droughty Too sandy Low content of organic matter Salinity Carbonate content Sodium content	0.00 0.02 0.02 0.12 0.50 0.80 0.90	Good		Poor Hard to reclaim Rock fragments Too sandy Salinity Carbonate content Sodium content	0.00 0.00 0.02 0.50 0.80 0.90
Izo-----	20	Poor Too sandy Droughty Low content of organic matter	0.00 0.00 0.12	Good		Poor Too sandy Hard to reclaim Rock fragments	0.00 0.00 0.00
2680: Espint-----	35	Poor Droughty Depth to bedrock Too clayey Low content of organic matter	0.00 0.00 0.00 0.88	Poor Depth to bedrock Slope	0.00 0.00	Poor Depth to bedrock Slope Too Clayey Rock fragments	0.00 0.00 0.00 0.00
Vindicator-----	30	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00
Espint-----	20	Poor Droughty Depth to bedrock Too clayey Low content of organic matter	0.00 0.00 0.00 0.88	Poor Depth to bedrock	0.00	Poor Depth to bedrock Too Clayey Rock fragments Slope	0.00 0.00 0.00 0.96
2681: Espint-----	40	Poor Droughty Depth to bedrock Too clayey Low content of organic matter	0.00 0.00 0.00 0.88	Poor Depth to bedrock Slope	0.00 0.00	Poor Depth to bedrock Slope Too Clayey Rock fragments	0.00 0.00 0.00 0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Stewval-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.88			Slope	0.00
Vindicator-----	15	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.00
2682: Espint-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.00	Slope	0.00
		Too clayey	0.00			Too Clayey	0.00
		Low content of organic matter	0.88			Rock fragments	0.00
Gabbvally-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
						Slope	0.00
Stewval-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.88			Slope	0.00
2690: Leo-----	55	Fair		Good		Poor	
		Droughty	0.01			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Too sandy	0.54			Too sandy	0.54
Izo-----	35	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
2701: Cobatus-----	90	Poor		Fair		Poor	
		Too alkaline	0.00	Shrink-swell	0.87	Sodium content	0.00
		Sodium content	0.00			Salinity	0.00
		Low content of organic matter	0.12				
		Salinity	0.50				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2710: Papoose-----	35	Poor Too alkaline Low content of organic matter Droughty Too sandy	0.00 0.12 0.29 0.78	Good		Poor Hard to reclaim Rock fragments Sodium content Salinity Too sandy	0.00 0.00 0.40 0.50 0.78
Vindicator-----	35	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock	0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.96
Espint-----	15	Poor Droughty Depth to bedrock Too clayey Low content of organic matter	0.00 0.00 0.00 0.88	Poor Depth to bedrock	0.00	Poor Depth to bedrock Too Clayey Rock fragments	0.00 0.00 0.00
2720: Unsel-----	40	Poor Too sandy Too alkaline Low content of organic matter Droughty Sodium content	0.00 0.00 0.12 0.19 0.78	Good		Poor Too sandy Hard to reclaim Rock fragments Sodium content Salinity	0.00 0.00 0.00 0.00 0.50
Stonell-----	30	Poor Too alkaline Droughty Too sandy Low content of organic matter Salinity Carbonate content Sodium content	0.00 0.02 0.02 0.12 0.50 0.80 0.90	Good		Poor Hard to reclaim Rock fragments Too sandy Salinity Carbonate content Sodium content	0.00 0.00 0.02 0.50 0.80 0.90
Veet-----	20	Poor Droughty Low content of organic matter	0.00 0.12	Fair No cobble limitation	0.99	Poor Hard to reclaim Rock fragments	0.00 0.00
2730: Gabbvally-----	35	Poor Droughty Depth to bedrock	0.00 0.00	Poor Depth to bedrock Slope	0.00 0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Blacktop-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Stone content	0.77	Depth to bedrock	0.00
		Stone content	0.77				
Espint-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	Slope	0.68	Too Clayey	0.00
		Too clayey	0.00			Rock fragments	0.00
		Low content of organic matter	0.88			Slope	0.00
2731: Gabbvally-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
						Slope	0.00
Downeyville-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.00
Vindicator-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00			Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.96
2732: Gabbvally-----	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
						Slope	0.00
Tognoni-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Too clayey	0.00	Shrink-swell	0.87	Slope	0.00
		Low content of organic matter	0.12	Cobble content	0.91	Too Clayey	0.00
		Cobble content	0.82				
Downeyville-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.00
2734: Gabbvally-----	70	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
						Depth to bedrock	0.00

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Downeyville-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.00
2735: Gabbvally-----	45	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
						Slope	0.00
Wahguyhe-----	25	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.00
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2736: Gabbvally-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
						Depth to bedrock	0.00
Brier-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Cobble content	0.42	Cobble content	0.10	Depth to bedrock	0.00
				Shrink-swell	0.87		
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
2740: Tognoni-----	65	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Shrink-swell	0.87	Depth to bedrock	0.00
		Too clayey	0.00	Cobble content	0.91	Too Clayey	0.00
		Low content of organic matter	0.12	Slope	0.92	Slope	0.00
		Cobble content	0.82				
Blacktop-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
						Depth to bedrock	0.00
2741: Blacktop-----	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12	Stone content	0.77	Depth to bedrock	0.00
		Stone content	0.77				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Downeyville-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.00
Tognoni-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Too clayey	0.00	Cobble content	0.59	Slope	0.00
		Low content of organic matter	0.12	Shrink-swell	0.87	Too Clayey	0.00
		Cobble content	0.27				
2750: Silverbow-----	50	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12			Sodium content	0.78
		Sodium content	0.78				
		No cobble limitation	0.99				
Wardenot-----	20	Fair		Fair		Poor	
		Too sandy	0.02	Cobble content	0.84	Hard to reclaim	0.00
		Droughty	0.08			Rock fragments	0.00
		Low content of organic matter	0.12			Too sandy	0.02
		Sodium content	0.78			Sodium content	0.78
Izo-----	15	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
2760: Downeyville-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.00	Depth to bedrock	0.00
		Low content of organic matter	0.12			Slope	0.00
Unsel-----	30	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Too alkaline	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Droughty	0.19			Sodium content	0.00
		Sodium content	0.78			Salinity	0.50
						Slope	0.84

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Tokoper-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Depth to cemented pan	0.00	Depth to bedrock	0.00
		Depth to bedrock	0.00	No cobble limitation	0.99	Depth to cemented pan	0.00
		Low content of organic matter	0.12			Slope	0.84
		Sodium content	0.90				
		Cobble content	0.97				
2770: Bullfor-----	50	Poor		Poor		Fair	
		Wind erosion	0.00	Depth to cemented pan	0.00	Depth to cemented pan	0.10
		Droughty	0.00			Too sandy	0.19
		Too alkaline	0.00				
		Depth to cemented pan	0.10				
		Low content of organic matter	0.12				
		Too sandy	0.19				
Panor-----	30	Poor		Fair		Poor	
		Salinity	0.00	Shrink-swell	0.87	Sodium content	0.00
		Sodium content	0.00			Salinity	0.00
		Too alkaline	0.00			Too Clayey	0.57
		Low content of organic matter	0.12			Hard to reclaim	0.68
		Water erosion	0.68				
		Too clayey	0.98				
Bluepoint-----	15	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Sodium content	0.78
		Low content of organic matter	0.12			Slope	0.84
		Droughty	0.74				
		Sodium content	0.78				
2781: Haymont-----	50	Poor		Good		Poor	
		Sodium content	0.00			Sodium content	0.00
		Low content of organic matter	0.12			Salinity	0.00
		Salinity	0.88			Carbonate content	0.92
		Water erosion	0.90				
		Carbonate content	0.92				
Bluepoint-----	20	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Sodium content	0.78
		Low content of organic matter	0.12				
		Droughty	0.74				
		Sodium content	0.78				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Panor-----	15	Poor		Fair		Poor	
		Salinity	0.00	Shrink-swell	0.87	Sodium content	0.00
		Sodium content	0.00			Salinity	0.00
		Too alkaline	0.00			Too Clayey	0.57
		Low content of organic matter	0.12			Hard to reclaim	0.68
		Water erosion	0.68				
		Too clayey	0.98				
2810: Ashmed, moist-----	50	Poor		Good		Poor	
		Too alkaline	0.00			Hard to reclaim	0.00
		Salinity	0.00			Rock fragments	0.00
		Sodium content	0.00			Sodium content	0.00
		Low content of organic matter	0.12			Salinity	0.00
		Carbonate content	0.92			Carbonate content	0.92
		Droughty	0.94				
Yermo-----	20	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Niavi-----	15	Poor		Fair		Poor	
		Droughty	0.00	Cobble content	0.53	Hard to reclaim	0.00
		Low content of organic matter	0.02			Rock fragments	0.00
		Too sandy	0.22			Too sandy	0.22
2820: Strozi-----	60	Fair		Poor		Poor	
		Droughty	0.01	Depth to cemented pan	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Sodium content	0.40
		Sodium content	0.40			Salinity	0.50
		Depth to cemented pan	0.71			Depth to cemented pan	0.71
Corbilt-----	30	Poor		Fair		Poor	
		Too alkaline	0.00	Depth to cemented pan	0.95	Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.08
		Droughty	0.96			Carbonate content	0.97
		Carbonate content	0.97				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2840: Armpup-----	60	Poor Wind erosion Too alkaline Salinity Sodium content Too clayey Low content of organic matter Carbonate content	 0.00 0.00 0.00 0.00 0.00 0.12 0.92	Fair Shrink-swell Depth to bedrock	 0.88 0.92	Poor Hard to reclaim Rock fragments Sodium content Salinity Too Clayey Carbonate content	 0.00 0.00 0.00 0.00 0.00 0.92
Strozi-----	35	Fair Sodium content Droughty Low content of organic matter Depth to cemented pan	 0.03 0.03 0.12 0.71	Poor Depth to cemented pan	0.00	Poor Rock fragments Sodium content Salinity Depth to cemented pan	 0.00 0.02 0.50 0.71
2850: Scottcas-----	50	Poor Droughty Too alkaline Too sandy Low content of organic matter Sodium content	 0.00 0.00 0.06 0.12 0.78	Good		Poor Hard to reclaim Rock fragments Too sandy Salinity Sodium content	 0.00 0.00 0.06 0.50 0.90
Yermo-----	35	Fair Low content of organic matter Droughty Sodium content	 0.12 0.35 0.78	Fair Cobble content	0.97	Poor Rock fragments Hard to reclaim Sodium content	 0.00 0.00 0.78
2860: Sezna-----	50	Poor Droughty Depth to cemented pan Low content of organic matter Cobble content	 0.00 0.00 0.12 0.93	Poor Depth to cemented pan Shrink-swell	 0.00 0.87	Poor Rock fragments Depth to cemented pan	 0.00 0.00
Yermo-----	35	Fair Low content of organic matter Droughty Sodium content	 0.12 0.35 0.78	Fair Cobble content	0.97	Poor Rock fragments Hard to reclaim Sodium content	 0.00 0.00 0.78

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2870: Kanakkey-----	85	Poor		Poor		Poor	
		Too clayey	0.00	Depth to bedrock	0.00	Too Clayey	0.00
		Droughty	0.00	Slope	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Cobble content	0.40	Depth to bedrock	0.00
		Cobble content	0.11	Shrink-swell	0.87	Slope	0.00
		Low content of organic matter	0.12				
2880: Bacho-----	45	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00	Shrink-swell	0.87	Depth to cemented pan	0.00
		Too clayey	0.00			Too Clayey	0.00
		Low content of organic matter	0.12				
Yermo-----	25	Fair		Fair		Poor	
		Low content of organic matter	0.12	Cobble content	0.97	Rock fragments	0.00
		Droughty	0.35			Hard to reclaim	0.00
		Sodium content	0.78			Sodium content	0.78
Arizo-----	15	Poor		Fair		Poor	
		Too sandy	0.00	Cobble content	0.92	Too sandy	0.00
		Droughty	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Sodium content	0.78			Sodium content	0.78
2890: Nopah-----	35	Poor		Fair		Poor	
		Carbonate content	0.00	Shrink-swell	0.87	Carbonate content	0.00
		Too alkaline	0.00			Salinity	0.00
		Low content of organic matter	0.12			Sodium content	0.90
		Water erosion	0.68				
		Sodium content	0.90				
		Salinity	0.97				
Woda-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Carbonate content	0.00
		Carbonate content	0.00			Depth to cemented pan	0.00
		Depth to cemented pan	0.00			Sodium content	0.40
		Too alkaline	0.00			Salinity	0.50
		Low content of organic matter	0.12			Rock fragments	0.88
		Sodium content	0.40			Slope	0.96
		No water erosion limitation	0.99				
Gullied Land-----	20	Not rated		Not rated		Not rated	

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2900: Playas-----	100	Not rated		Not rated		Not rated	
2901: Playas-----	40	Not rated		Not rated		Not rated	
Corbilt-----	30	Poor		Fair		Poor	
		Too alkaline	0.00	Depth to cemented pan	0.95	Rock fragments	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.08
		Droughty	0.96			Carbonate content	0.97
Bluepoint-----	20	Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Sodium content	0.78
		Low content of organic matter	0.12				
		Droughty	0.74				
		Sodium content	0.78				
2903: Playas-----	45	Not rated		Not rated		Not rated	
Mobl-----	30	Poor		Good		Poor	
		Salinity	0.00			Rock fragments	0.00
		Sodium content	0.00			Sodium content	0.00
		Too sandy	0.00			Salinity	0.00
		Too alkaline	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Too sandy	0.00
Kawich-----	15	Droughty	0.48				
		Poor		Good		Poor	
		Too sandy	0.00			Too sandy	0.00
		Wind erosion	0.00			Salinity	0.50
		Too alkaline	0.00			Sodium content	0.78
		Droughty	0.09				
		Low content of organic matter	0.12				
		Sodium content	0.78				
2910: Dune Land-----	100	Not rated		Not rated		Not rated	
2920: Dumps-----	100	Not rated		Not rated		Not rated	

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
2930: Seralin-----	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Slope	0.00
		Depth to bedrock	0.00	Slope	0.00	Rock fragments	0.00
		Low content of organic matter	0.12			Depth to bedrock	0.00
						Salinity	0.50
Rock Outcrop-----	15	Not rated		Not rated		Not rated	
Sed-----	15	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.10	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88	Shrink-swell	0.87	Depth to bedrock	0.10
2940: Schader-----	40	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Low content of organic matter	0.08	Slope	0.00	Slope	0.00
		Depth to bedrock	0.35			Depth to bedrock	0.35
Sed-----	30	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.10	Slope	0.00	Slope	0.00
		Low content of organic matter	0.88	Shrink-swell	0.87	Depth to bedrock	0.10
Cruzspring-----	15	Poor		Poor		Poor	
		Droughty	0.00	Depth to bedrock	0.00	Rock fragments	0.00
		Depth to bedrock	0.00	Slope	0.18	Depth to bedrock	0.00
		Low content of organic matter	0.08			Slope	0.00
2950: Pits-----	100	Not rated		Not rated		Not rated	
2951: Pits-----	100	Not rated		Not rated		Not rated	
2960: Tomel-----	35	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Too alkaline	0.00			Sodium content	0.78
		Low content of organic matter	0.12				
		Sodium content	0.78				
		Salinity	0.88				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Ardivey-----	30	Poor		Fair		Poor	
		Too alkaline	0.00	Cobble content	0.65	Hard to reclaim	0.00
		Droughty	0.02			Rock fragments	0.00
		Too sandy	0.07			Too sandy	0.07
		Low content of organic matter	0.12			Sodium content	0.78
		Sodium content	0.78			Carbonate content	0.92
		Carbonate content	0.92				
Wardenot-----	20	Fair		Fair		Poor	
		Too sandy	0.02	Cobble content	0.84	Hard to reclaim	0.00
		Droughty	0.08			Rock fragments	0.00
		Low content of organic matter	0.12			Too sandy	0.02
		Sodium content	0.78			Sodium content	0.78
2961: Tomel-----	55	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Too alkaline	0.00			Sodium content	0.78
		Low content of organic matter	0.12				
		Sodium content	0.78				
		Salinity	0.88				
Breko-----	15	Fair		Good		Poor	
		Low content of organic matter	0.12			Hard to reclaim	0.00
		Droughty	0.58			Rock fragments	0.00
		Carbonate content	0.92				
Wardenot-----	15	Fair		Fair		Poor	
		Too sandy	0.02	Cobble content	0.77	Hard to reclaim	0.00
		Low content of organic matter	0.12			Rock fragments	0.00
		Droughty	0.18			Too sandy	0.02
		Sodium content	0.78			Sodium content	0.78
2970: Destazo-----	40	Poor		Fair		Poor	
		Carbonate content	0.00	Shrink-swell	0.87	Carbonate content	0.00
		Low content of organic matter	0.12			Hard to reclaim	0.00
		Droughty	0.99			Rock fragments	0.00
Nowoy-----	30	Poor		Fair		Poor	
		Carbonate content	0.00	Shrink-swell	0.96	Carbonate content	0.00
		Too alkaline	0.00			Sodium content	0.40
		Low content of organic matter	0.12			Salinity	0.50
		Too clayey	0.98			Too Clayey	0.57
		No water erosion limitation	0.99				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Gullied Land-----	20	Not rated		Not rated		Not rated	
2971: Upspring-----	85	Poor Droughty Depth to bedrock Low content of organic matter	0.00 0.00 0.12	Poor Depth to bedrock	0.00	Poor Rock fragments Depth to bedrock Slope	0.00 0.00 0.37
2990: Lealandic-----	60	Poor Droughty Too clayey Depth to cemented pan Low content of organic matter Sodium content	0.00 0.00 0.05 0.12 0.90	Poor Depth to cemented pan Shrink-swell	0.00 0.12	Poor Rock fragments Too Clayey Depth to cemented pan Sodium content	0.00 0.00 0.05 0.90
Ashmed-----	30	Poor Too alkaline Salinity Sodium content Low content of organic matter Carbonate content Droughty	0.00 0.00 0.00 0.12 0.92 0.94	Good		Poor Hard to reclaim Rock fragments Sodium content Salinity Carbonate content	0.00 0.00 0.00 0.00 0.92
3021: Casaga-----	45	Poor Sodium content Too alkaline Low content of organic matter Salinity Carbonate content Too clayey	0.00 0.00 0.12 0.50 0.80 0.98	Fair Shrink-swell	0.99	Poor Hard to reclaim Sodium content Salinity Rock fragments Too Clayey Carbonate content	0.00 0.00 0.00 0.28 0.57 0.97
Destazo-----	25	Poor Carbonate content Low content of organic matter Droughty	0.00 0.12 0.99	Fair Shrink-swell	0.87	Poor Carbonate content Hard to reclaim Rock fragments	0.00 0.00 0.00
Yurm-----	20	Poor Droughty Depth to cemented pan Low content of organic matter Sodium content Carbonate content	0.00 0.00 0.12 0.40 0.80	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Sodium content Salinity Carbonate content	0.00 0.00 0.40 0.50 0.80

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3022: Casaga-----	40	Poor Salinity Sodium content Too alkaline Low content of organic matter Carbonate content Too clayey	0.00 0.00 0.00 0.12 0.80 0.98	Fair Shrink-swell	0.99	Poor Sodium content Salinity Hard to reclaim Too Clayey Carbonate content	0.00 0.00 0.00 0.57 0.97
Woda-----	35	Poor Droughty Carbonate content Depth to cemented pan Too alkaline Low content of organic matter Sodium content No water erosion limitation	0.00 0.00 0.00 0.00 0.12 0.40 0.99	Poor Depth to cemented pan	0.00	Poor Carbonate content Depth to cemented pan Sodium content Salinity Rock fragments	0.00 0.00 0.40 0.50 0.88
Yermo-----	20	Fair Low content of organic matter Droughty Sodium content	0.12 0.35 0.78	Fair Cobble content	0.97	Poor Rock fragments Hard to reclaim Sodium content	0.00 0.00 0.78
3052: Bohnbob-----	65	Poor Carbonate content Too alkaline Low content of organic matter Sodium content Too clayey	0.00 0.00 0.12 0.40 0.98	Fair Shrink-swell	0.94	Fair Carbonate content Sodium content Salinity Too Clayey	0.32 0.40 0.50 0.57
Caslo-----	20	Poor Too alkaline Carbonate content Salinity Sodium content Low content of organic matter Too clayey	0.00 0.00 0.00 0.00 0.12 0.98	Fair Depth to saturated zone Shrink-swell	0.14 0.87	Poor Carbonate content Sodium content Salinity Depth to saturated zone Too Clayey	0.00 0.00 0.00 0.14 0.57
3101: Bluepoint-----	45	Poor Wind erosion Low content of organic matter Too sandy Droughty Sodium content	0.00 0.12 0.28 0.74 0.78	Good		Fair Too sandy Sodium content Slope	0.28 0.78 0.84

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Besherm-----	40	Poor		Fair		Poor	
		Carbonate content	0.00	Shrink-swell	0.12	Carbonate content	0.00
		Sodium content	0.00			Too Clayey	0.00
		Too clayey	0.00			Salinity	0.00
		Too alkaline	0.00			Sodium content	0.40
		Low content of organic matter	0.12				
		Salinity	0.50				
3120: Nowoy-----	45	Poor		Fair		Poor	
		Carbonate content	0.00	Shrink-swell	0.96	Carbonate content	0.00
		Too alkaline	0.00			Sodium content	0.40
		Low content of organic matter	0.12			Salinity	0.50
		Too clayey	0.98			Too Clayey	0.57
		No water erosion limitation	0.99				
Tanazza-----	25	Poor		Fair		Poor	
		Carbonate content	0.00	Shrink-swell	0.99	Carbonate content	0.00
		Low content of organic matter	0.12				
		Water erosion	0.68				
Yurm-----	20	Poor		Poor		Poor	
		Droughty	0.00	Depth to cemented pan	0.00	Rock fragments	0.00
		Depth to cemented pan	0.00			Depth to cemented pan	0.00
		Low content of organic matter	0.12			Sodium content	0.40
		Sodium content	0.40			Salinity	0.50
		Carbonate content	0.80			Carbonate content	0.80
3150: Casaga-----	85	Poor		Fair		Poor	
		Sodium content	0.00	Shrink-swell	0.99	Hard to reclaim	0.00
		Too alkaline	0.00			Sodium content	0.00
		Low content of organic matter	0.12			Salinity	0.00
		Salinity	0.50			Rock fragments	0.28
		Carbonate content	0.80			Too Clayey	0.57
		Too clayey	0.98			Carbonate content	0.97
3230: Alko-----	60	Poor		Poor		Poor	
		Too alkaline	0.00	Depth to cemented pan	0.00	Sodium content	0.00
		Droughty	0.00			Depth to cemented pan	0.00
		Salinity	0.00			Rock fragments	0.12
		Sodium content	0.00				
		Depth to cemented pan	0.00				
		Low content of organic matter	0.12				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Casaga-----	30	Poor		Fair		Poor	
		Salinity	0.00	Shrink-swell	0.99	Sodium content	0.00
		Sodium content	0.00			Salinity	0.00
		Too alkaline	0.00			Hard to reclaim	0.00
		Low content of organic matter	0.12			Too Clayey	0.57
		Carbonate content	0.80			Carbonate content	0.97
		Too clayey	0.98				
3252: Bohnob-----	70	Poor		Fair		Fair	
		Carbonate content	0.00	Shrink-swell	0.94	Carbonate content	0.32
		Too alkaline	0.00			Sodium content	0.40
		Low content of organic matter	0.12			Salinity	0.50
		Sodium content	0.40			Too Clayey	0.57
		Too clayey	0.98				
Cobatus-----	15	Poor		Fair		Poor	
		Too alkaline	0.00	Shrink-swell	0.87	Sodium content	0.00
		Sodium content	0.00			Salinity	0.00
		Low content of organic matter	0.12				
		Salinity	0.50				
3302: Rumpah-----	90	Poor		Fair		Poor	
		Too clayey	0.00	Shrink-swell	0.12	Too Clayey	0.00
		Carbonate content	0.00			Sodium content	0.00
		Sodium content	0.00			Salinity	0.00
		Too alkaline	0.00			Carbonate content	0.32
		Low content of organic matter	0.12				
		Salinity	0.97				
3313: Besherm-----	85	Poor		Fair		Poor	
		Carbonate content	0.00	Shrink-swell	0.12	Carbonate content	0.00
		Sodium content	0.00			Too Clayey	0.00
		Too clayey	0.00			Salinity	0.00
		Too alkaline	0.00			Sodium content	0.40
		Low content of organic matter	0.12				
		Salinity	0.50				
3320: Haymont-----	85	Poor		Good		Poor	
		Sodium content	0.00			Sodium content	0.00
		Low content of organic matter	0.12			Salinity	0.00
		Salinity	0.88			Carbonate content	0.92
		Water erosion	0.90				
		Carbonate content	0.92				

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
3333: Nopah-----	85	Poor Carbonate content Too alkaline Low content of organic matter Water erosion Sodium content Salinity	0.00 0.00 0.12 0.68 0.90 0.97	Fair Shrink-swell	0.87	Poor Carbonate content Salinity Sodium content	0.00 0.00 0.90
4010: Tanazza-----	35	Poor Carbonate content Low content of organic matter Water erosion	0.00 0.12 0.68	Fair Shrink-swell	0.99	Poor Carbonate content	0.00
Wechech-----	35	Poor Droughty Depth to cemented pan Too alkaline Low content of organic matter Carbonate content	0.00 0.00 0.00 0.12 0.16	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Carbonate content	0.00 0.00 0.16
Wodavar-----	15	Poor Too alkaline Droughty Carbonate content Depth to cemented pan Low content of organic matter Sodium content	0.00 0.00 0.00 0.00 0.12 0.78	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Carbonate content Sodium content	0.00 0.00 0.16 0.78
4030: Wechech-----	45	Poor Droughty Depth to cemented pan Carbonate content Low content of organic matter	0.00 0.00 0.08 0.12	Poor Depth to cemented pan	0.00	Poor Rock fragments Depth to cemented pan Carbonate content	0.00 0.00 0.08
Nopah-----	20	Poor Carbonate content Too alkaline Low content of organic matter Water erosion Sodium content Salinity	0.00 0.00 0.12 0.68 0.90 0.97	Fair Shrink-swell	0.87	Poor Carbonate content Salinity Sodium content	0.00 0.00 0.90

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
Yermo-----	20	Fair Low content of organic matter Droughty Sodium content	0.12 0.35 0.78	Fair Cobble content	0.97	Poor Rock fragments Hard to reclaim Sodium content	0.00 0.00 0.78
4060: Besherm-----	70	Poor Carbonate content Sodium content Too clayey Too alkaline Low content of organic matter Salinity	0.00 0.00 0.00 0.00 0.12 0.50	Fair Shrink-swell	0.12	Poor Carbonate content Too Clayey Salinity Sodium content	0.00 0.00 0.00 0.40
Tanazza-----	15	Poor Carbonate content Low content of organic matter Water erosion	0.00 0.12 0.68	Fair Shrink-swell	0.99	Poor Carbonate content	0.00
4070: Gynelle-----	35	Poor Too sandy Sodium content Droughty Too alkaline Low content of organic matter Cobble content	0.00 0.00 0.00 0.00 0.12 0.99	Fair Cobble content	0.39	Poor Too sandy Rock fragments Sodium content Hard to reclaim Salinity	0.00 0.00 0.00 0.00 0.50
Kawich-----	25	Poor Too sandy Wind erosion Too alkaline Droughty Low content of organic matter Sodium content	0.00 0.00 0.00 0.09 0.12 0.78	Fair Slope	0.08	Poor Too sandy Slope Salinity Sodium content	0.00 0.00 0.50 0.78
Cirac-----	25	Poor Salinity Sodium content Too alkaline Low content of organic matter	0.00 0.00 0.00 0.12	Good		Poor Sodium content Salinity Rock fragments	0.00 0.00 0.72
4071: Corbilt-----	85	Poor Too alkaline Low content of organic matter Sodium content Carbonate content	0.00 0.01 0.78 0.97	Good		Poor Rock fragments Hard to reclaim Sodium content Carbonate content	0.00 0.68 0.78 0.97

TABLE 10b.--CONSTRUCTION MATERIALS--Continued

Map symbol and soil name	Pct. of map unit	Potential source of reclamation material		Potential source of roadfill		Potential source of topsoil	
		Rating class and limiting features	Value	Rating class and limiting features	Value	Rating class and limiting features	Value
4080: Water-----	100	Not rated		Not rated		Not rated	

(Absence of an entry indicates that the data were not estimated.)

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Commski-----	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam, extremely gravelly fine sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-20	5-10	25-30	NP-5
1316: Lastchance-----	0-2	Extremely gravelly loam	GC-GM	A-1, A-2	0-3	5-25	20-35	15-25	15-25	10-20	25-30	5-10
	2-20	Very gravelly loam, very gravelly sandy loam, very gravelly fine sandy loam, extremely gravelly fine sandy loam, extremely gravelly sandy loam	GC-GM	A-1, A-2	0	0-15	25-60	20-50	15-45	10-30	20-30	5-10
	20-60	Cemented material			---	---	---	---	---	---	---	---
Ferrogold-----	0-3	Extremely gravelly loam	GP-GC	A-1, A-2	0-5	5-15	15-35	10-25	10-20	5-10	20-30	5-10
	3-9	Very gravelly loam, very gravelly fine sandy loam	GC-GM, GW-GC	A-1, A-2	0-5	0-15	25-60	20-50	15-45	5-30	20-30	5-10
	9-15	Very gravelly loam, very gravelly fine sandy loam, extremely gravelly fine sandy loam	GC-GM, GW-GC	A-1, A-2	0-5	0-15	25-60	20-50	15-45	5-30	20-30	5-10
	15-60	Cemented material			---	---	---	---	---	---	---	---
Commski-----	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam, extremely gravelly fine sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-20	5-10	25-30	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
1321: Boxspring-----	0-2	Extremely gravelly loam	GM	A-1	0-5	15-25	35-45	25-30	20-30	15-25	20-25	NP-5
	2-15	Very gravelly loam, very cobbly loam, extremely gravelly loam	GM	A-1, A-2, A-4	0	10-25	30-60	25-55	20-45	15-40	20-25	NP-5
	15-25	Unweathered bedrock			---	---	---	---	---	---	---	---
Seralin-----	0-2	Extremely gravelly very fine sandy loam	GM, GW-GM	A-1	0-5	15-25	35-60	15-30	10-25	5-20	20-25	NP-5
	2-7	Very gravelly loam	GM	A-1, A-2	0	10-15	40-65	35-50	30-40	20-30	20-25	NP
	7-14	Very gravelly loam, very gravelly very fine sandy loam	SM	A-1, A-2	0	15-30	75-85	45-65	25-45	15-30	20-25	NP-5
	14-20	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock Outcrop----	---	---	---	---	---	---	---	---	---	---	---	---
1340: Longjim-----	0-3	Extremely gravelly fine sandy loam	GM, GP-GM	A-1	0	0-15	20-40	10-30	5-25	5-15	20-25	NP-5
	3-8	Gravelly loam	GC-GM, GM, SC-SM, SM	A-4	0	0	55-80	50-75	45-65	35-50	15-25	NP-10
	8-16	Very gravelly sandy loam, very gravelly fine sandy loam, very gravelly coarse sandy loam	GM	A-1	0	0	30-55	25-50	15-35	10-20	0-14	NP
	16-20	Indurated			---	---	---	---	---	---	---	---
	20-45	Cemented			---	---	---	---	---	---	---	---
Niavi-----	0-2	Extremely cobbly fine sandy loam	GC-GM, GP-GC	A-1, A-2	0-5	30-60	15-45	10-35	10-30	5-15	20-25	5-10
	2-8	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GP-GC	A-1, A-2	0-5	10-30	15-55	10-45	5-35	5-20	20-25	5-10
	8-29	Stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam	GP, GP-GM	A-1	0-5	10-30	15-45	5-30	5-20	0-5	15-15	NP-5
	29-60	Stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam	GP, GP-GM	A-1	0-5	10-30	15-45	5-30	5-20	0-5	15-15	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
1871: Irongold-----	In				Pct	Pct					Pct	
	0-1	Extremely gravelly loam	GM	A-1	0-5	0-10	25-35	15-25	15-20	10-15	15-25	NP-5
	1-7	Gravelly loam, loam	GM, ML	A-4	0-5	0-5	70-95	60-90	50-80	45-70	15-25	NP-5
	7-11	Very gravelly loam, very gravelly sandy loam, gravelly loam	GM	A-1, A-2, A-4	0-5	0-10	35-70	25-60	20-50	15-40	15-25	NP-5
	11-34 34-60	Cemented Extremely gravelly loamy coarse sand	GP, GP-GM	A-1	---	---	---	---	---	---	---	---
Irongold-----	0-1	Extremely gravelly loam	GM	A-1	0-5	0-10	25-35	15-25	15-20	10-15	15-25	NP-5
	1-7	Gravelly loam, loam	GM, ML	A-4	0-5	0-5	70-95	60-90	50-80	45-70	15-25	NP-5
	7-11	Very gravelly loam, very gravelly sandy loam, gravelly loam	GM	A-1, A-2, A-4	0-5	0-10	35-70	25-60	20-50	15-40	15-25	NP-5
	11-34 34-60	Cemented Extremely gravelly loamy coarse sand	GP, GP-GM	A-1	---	---	---	---	---	---	---	---
	0-1	Extremely gravelly loam	GM	A-1	0-5	0-10	25-35	15-25	15-20	10-15	15-25	NP-5
Weiser-----	0-6	Gravelly very fine sandy loam	GM, SM	A-4	0	0	60-80	55-75	50-70	35-50	15-25	NP-5
	6-10	Extremely gravelly loam	GP-GM	A-1	0-5	0-10	15-30	10-25	5-20	5-10	15-25	NP-5
	10-42	Extremely gravelly sandy loam	GP, GP-GM	A-1	0-5	0-10	15-30	10-25	5-20	0-10	15-25	NP-5
	42-60	Extremely gravelly sandy loam	GP, GP-GC, GP-GM	A-1, A-2	0-5	0-10	15-30	10-25	5-20	0-10	15-25	NP-10
	2002: Rock Outcrop----	---	---	---	---	---	---	---	---	---	---	---
Upspring-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-10	35-50	25-40	15-30	10-20	15-25	NP-5
	8-12	Very gravelly fine sandy loam, very gravelly sandy loam	GM	A-1	0	0-25	40-55	35-50	25-40	10-20	15-25	NP-5
	12-22	Unweathered bedrock			---	---	---	---	---	---	---	---
Rubble Land----	0-60	Fragmental material	GW	A-1	30-65	30-65	0-10	0-5	0-5	0	0-14	NP
2004: Rock Outcrop----	---	---	---	---	---	---	---	---	---	---	---	---
Zyplar-----	0-7	Gravelly sandy loam	SC-SM, SM	A-2, A-4	5-10	0-10	70-85	60-80	45-65	25-40	15-25	NP-10
	7-12	Gravelly clay loam, gravelly loam, gravelly sandy clay loam	GC, SC	A-6, A-7	0	0-10	65-80	55-75	50-60	35-45	30-45	10-20
	12-16	Unweathered bedrock			---	---	---	---	---	---	---	---

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2005: Rock Outcrop----	---	---	---	---	---	---	---	---	---	---	---	---
St. Thomas-----	0-3	Very cobbly fine sandy loam	GM, SM	A-1, A-2	5-15	25-35	50-75	45-65	30-50	20-35	15-20	NP-5
	3-12	Extremely cobbly loam, extremely gravelly loam, extremely gravelly fine sandy loam	GC-GM, GM	A-1, A-2	0-5	15-55	25-45	20-40	20-35	10-30	15-25	NP-10
	12-22	Unweathered bedrock			---	---	---	---	---	---	---	---
St. Thomas-----	0-2	Very cobbly fine sandy loam	GM, SM	A-1, A-2	5-15	25-35	50-75	45-65	30-50	20-35	15-20	NP-5
	2-12	Extremely cobbly loam, extremely gravelly loam, extremely gravelly fine sandy loam	GC-GM, GM	A-1, A-2	0-5	15-55	25-45	20-40	20-35	10-30	15-25	NP-10
	12-22	Unweathered bedrock			---	---	---	---	---	---	---	---
2010: Longjim-----	0-3	Gravelly fine sandy loam	GC-GM, GM, SC-SM, SM	A-2, A-4	0	0-5	55-80	50-75	40-60	25-40	15-25	NP-10
	3-8	Gravelly loam	GC-GM, GM, SC-SM, SM	A-4	0	0	55-80	50-75	45-65	35-50	15-25	NP-10
	8-16	Very gravelly sandy loam, very gravelly fine sandy loam, very gravelly coarse sandy loam	GM	A-1	0	0	30-55	25-50	15-35	10-20	0-14	NP
	16-20	Indurated			---	---	---	---	---	---	---	---
	20-45	Cemented			---	---	---	---	---	---	---	---
2011: Sanwell-----	0-9	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	60-75	45-60	25-40	0-14	NP
	9-16	Gravelly sandy loam, gravelly fine sandy loam	SM	A-2, A-4	0	0-15	70-80	60-75	45-65	25-40	0-14	NP
	16-31	Very gravelly coarse sandy loam, very gravelly sandy loam	GM, SM	A-1	0	0	45-65	35-50	25-45	10-25	0-14	NP
	31-60	Very gravelly coarse sandy loam	GM	A-1	0	0	35-60	25-50	15-30	10-20	0-14	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2020: Weiser-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	0-15	30-65	25-55	20-45	15-30	15-25	NP-10
	6-60	Stratified very gravelly fine sandy loam to extremely gravelly sandy loam	GM, GW, GW- GC, GW-GM	A-1, A-2	0-5	0-40	20-35	10-35	5-30	0-20	15-25	NP-10
Canoto-----	0-11	Very gravelly sandy loam	GM	A-1	0	0-15	30-55	25-50	15-35	15-25	15-25	NP-5
	11-60	Stratified gravelly loam to extremely gravelly loamy coarse sand	GM	A-1	0	0-15	30-55	25-50	15-35	10-25	15-25	NP-5
2021: Weiser-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	0-15	30-65	25-55	20-45	15-30	15-25	NP-10
	6-60	Stratified very gravelly fine sandy loam to extremely gravelly sandy loam	GM, GW, GW- GC, GW-GM	A-1, A-2	0-5	0-40	20-35	10-35	5-30	0-20	15-25	NP-10
Nickel-----	0-7	Gravelly fine sandy loam	GM, SM	A-1, A-2	0	0-5	55-80	50-75	35-60	20-35	---	NP
	7-19	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GW, GW-GM	A-1	0-5	0-20	20-40	10-30	5-20	0-10	0-14	NP
	19-60	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GW, GW-GM	A-1	0-5	0-25	20-40	10-30	5-20	0-10	0-14	NP
2023: Commski-----	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam, extremely gravelly fine sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-20	5-10	25-30	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Commski-----	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam, extremely gravelly fine sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-20	5-10	25-30	NP-5
Sezna-----	0-3	Gravelly sandy loam	SM	A-1, A-2	0-1	0-10	65-85	50-75	40-60	20-35	15-25	NP-5
	3-18	Very cobbly clay loam, very cobbly loam, very cobbly sandy clay loam	GC	A-2, A-6	0-5	25-45	45-70	45-65	30-45	25-40	30-40	10-15
	18-60	Indurated			---	---	---	---	---	---	---	---
2030: Corbilt-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	55-75	50-65	20-45	---	NP
	4-32	Gravelly fine sandy loam, gravelly sandy loam	SM	A-1, A-2, A-4	0	0	65-80	55-75	45-65	20-45	---	NP
	32-56	Very gravelly sandy loam	SM	A-1, A-2	0	10-25	60-70	50-60	35-55	20-30	---	NP
	56-60	Cemented			---	---	---	---	---	---	---	---
2031: Corbilt-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	55-75	50-65	20-45	---	NP
	4-32	Gravelly fine sandy loam, gravelly sandy loam	SM	A-1, A-2, A-4	0	0	65-80	55-75	45-65	20-45	---	NP
	32-56	Very gravelly sandy loam	SM	A-1, A-2	0	10-25	60-70	50-60	35-55	20-30	---	NP
	56-60	Cemented			---	---	---	---	---	---	---	---
Skelon-----	0-4	Gravelly sandy loam	SM	A-1, A-2	0	0-5	60-80	50-75	40-60	15-35	0-14	NP
	4-28	Stratified very gravelly fine sandy loam to very gravelly coarse sandy loam	GM, GW-GM	A-1	0-5	0-10	35-55	30-50	15-35	10-20	0-14	NP
	28-44	Indurated			---	---	---	---	---	---	---	---
	44-52	Very gravelly sandy loam	GM	A-1	0-5	0-15	35-55	30-50	15-40	10-25	0-14	NP
	52-60	Extremely gravelly coarse sand	GP	A-1	0-5	10-25	20-35	15-30	5-15	0-5	0-14	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches						
							4	10	40	200		
	In				Pct	Pct					Pct	
2040: Yurm-----	0-3	Very gravelly sandy loam	GM	A-1, A-2	0	0	35-60	25-50	15-45	10-30	---	NP
	3-16	Very gravelly sandy loam	GM	A-1	0	0	35-55	25-50	15-35	10-20	15-25	NP-5
	16-60	Cemented			---	---	---	---	---	---	---	---
Canoto-----	0-11	Very gravelly sandy loam	GM	A-1	0	0-15	30-55	25-50	15-35	15-25	15-25	NP-5
	11-60	Stratified gravelly loam to extremely gravelly loamy coarse sand	GM	A-1	0	0-15	30-55	25-50	15-35	10-25	15-25	NP-5
Yurm, moist----	0-3	Very gravelly sandy loam	GM	A-1, A-2	0	0	35-60	25-50	15-45	10-30	---	NP
	3-16	Very gravelly sandy loam	GM	A-1	0	0	35-55	25-50	15-35	10-20	15-25	NP-5
	16-60	Cemented			---	---	---	---	---	---	---	---
2050: Canoto-----	0-11	Very gravelly sandy loam	GM	A-1	0	0-15	30-55	25-50	15-35	15-25	15-25	NP-5
	11-60	Stratified gravelly loam to extremely gravelly loamy coarse sand	GM	A-1	0	0-15	30-55	25-50	15-35	10-25	15-25	NP-5
Naye-----	0-7	Very gravelly fine sandy loam	GM	A-1	0	0-15	35-55	25-50	20-40	10-25	15-25	NP-5
	7-25	Very gravelly fine sandy loam, very gravelly sandy loam	GM	A-1	0	0-15	35-55	25-50	20-40	10-25	15-25	NP-5
	25-39	Indurated			---	---	---	---	---	---	---	---
2051: Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Woda-----	0-1	Sandy loam	SM	A-4	0	0	85-100	80-90	65-70	35-45	0-14	NP
	1-10	Sandy loam	SM	A-4	0	0	85-100	80-90	65-70	35-45	0-14	NP
	10-18	Gravelly clay loam, gravelly loam	CL, GC, SC	A-6	0	0	65-85	55-75	45-65	35-60	30-40	10-20
	18-60	Indurated			---	---	---	---	---	---	---	---
Nowoy-----	0-3	Gravelly loamy fine sand	SM	A-2	0	0	65-85	55-75	50-65	10-20	0-14	NP
	3-20	Very gravelly sandy loam	GM	A-1	0	0	40-55	35-50	25-45	15-25	0-14	NP
	20-60	Clay loam, silty clay loam	CL	A-6, A-7	0	0	100	100	90-95	60-85	35-50	15-25

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
2052: Canoto-----	0-11	Very gravelly sandy loam	GM	A-1	0	0-15	30-55	25-50	15-35	15-25	15-25	NP-5
	11-60	Stratified gravelly loam to extremely gravelly loamy coarse sand	GM	A-1	0	0-15	30-55	25-50	15-35	10-25	15-25	NP-5
2053: Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Greyeagle-----	0-3	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	30-55	25-50	15-30	5-20	20-25	NP-5
	3-6	Gravelly sandy loam	SM	A-1, A-2	0	0	60-75	50-65	30-45	15-30	20-25	NP-5
	6-8	Very gravelly sandy loam, very gravelly loamy sand	GM, GW-GM	A-1	0	0	30-55	25-50	15-35	5-20	20-25	NP-5
	8-24 24-60	Indurated Stratified extremely cobbley loamy sand to very gravelly loamy sand	GM, GP-GM, SM, SP-SM	A-1	---	---	---	---	---	---	---	---
Arizo-----	0-8	Very stony sandy loam	GM	A-1, A-2	25-35	15-30	45-65	35-60	25-45	10-35	15-25	NP-5
	8-60	Stratified cobbley coarse sand to extremely gravelly loamy sand	GP, GP-GM	A-1	0-5	10-30	35-55	20-50	10-30	0-10	---	NP
2054: Yermo, hot-----	0-6	Very gravelly sandy loam	GM, GC-GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-2, A-1	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-2, A-1	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Arizo-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-40	10-20	15-20	NP-5
	8-60	Stratified cobbley coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2055: Canoto-----	0-11	Very gravelly sandy loam	GM	A-1	0	0-15	30-55	25-50	15-35	15-25	15-25	NP-5
	11-60	Stratified gravelly loam to extremely gravelly loamy coarse sand	GM	A-1	0	0-15	30-55	25-50	15-35	10-25	15-25	NP-5
Canoto, moist---	0-11	Very gravelly sandy loam	GM	A-1	0	0-15	30-55	25-50	15-35	15-25	15-25	NP-5
	11-60	Stratified gravelly loam to extremely gravelly loamy coarse sand	GM	A-1	0	0-15	30-55	25-50	15-35	10-25	15-25	NP-5
2057: Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Commski-----	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam, extremely gravelly fine sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-20	5-10	25-30	NP-5
2058: Canoto-----	0-11	Very gravelly sandy loam	GM	A-1	0	0-15	30-55	25-50	15-35	15-25	15-25	NP-5
	11-60	Stratified gravelly loam to extremely gravelly loamy coarse sand	GM	A-1	0	0-15	30-55	25-50	15-35	10-25	15-25	NP-5
Nickel-----	0-7	Gravelly loam	GM, SM	A-2, A-4	0	0-5	55-80	50-75	35-60	30-50	20-25	NP-5
	7-19	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GW, GW-GM	A-1	0-5	0-20	20-40	10-30	5-20	0-10	0-14	NP
	19-60	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GW, GW-GM	A-1	0-5	0-25	20-40	10-30	5-20	0-10	0-14	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2060: Purob-----	0-3	Gravelly sandy loam	GM	A-1	0-5	0-10	25-40	15-30	10-25	10-20	15-25	NP-5
	3-10	Gravelly loam, very gravelly loam	GM	A-2, A-4	0	0-5	45-75	35-70	30-60	25-50	15-25	NP-5
	10-19	Very gravelly loam, extremely gravelly loam	GM	A-1, A-2	0	0-5	25-55	15-45	15-35	10-30	15-25	NP-5
	19-60	Indurated			---	---	---	---	---	---	---	---
Irongold-----	0-1	Extremely gravelly loam	GM	A-1	0-5	0-10	25-35	15-25	15-20	10-15	15-25	NP-5
	1-7	Gravelly loam, loam	GM, ML	A-4	0-5	0-5	70-95	60-90	50-80	45-70	15-25	NP-5
	7-11	Very gravelly loam, very gravelly sandy loam, gravelly loam	GM	A-1, A-2, A-4	0-5	0-10	35-70	25-60	20-50	15-40	15-25	NP-5
	11-34	Cemented			---	---	---	---	---	---	---	---
	34-60	Extremely gravelly loamy coarse sand	GP, GP-GM	A-1	0-5	0-5	30-45	10-25	5-10	0-10	---	NP
2061: Vace-----	0-12	Gravelly sandy loam	SC-SM, SM	A-2, A-4	0	0-5	70-90	60-75	45-65	25-40	20-25	NP-5
	12-30	Indurated			---	---	---	---	---	---	---	---
	30-60	Gravelly loamy sand, very gravelly sandy loam, very gravelly loamy sand	GM, GW-GM, SM, SW-SM	A-1, A-2	0	0-5	35-75	30-60	20-35	10-30	0-14	NP
2062: Purob-----	0-3	Gravelly sandy loam	GC-GM, GM, SC-SM, SM	A-2, A-4	0	0	55-80	50-75	40-60	25-45	20-30	NP-10
	3-19	Stratified gravelly loam to very gravelly loam	CL, CL-ML, GC, GC-GM	A-4, A-6	0	0	55-80	50-75	45-65	35-55	25-35	5-15
	19-26	Indurated			---	---	---	---	---	---	---	---
Niavi-----	0-2	Extremely cobbly fine sandy loam	GP-GC, GC-GM	A-1, A-2	0-5	30-60	15-45	10-35	10-30	5-15	20-25	5-10
	2-8	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GP-GC	A-1, A-2	0-5	10-30	15-55	10-45	5-35	5-20	20-25	5-10
	8-29	Stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam	GP, GP-GM	A-1	0-5	10-30	15-45	5-30	5-20	0-5	15-15	NP-5
	29-60	Stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam	GP, GP-GM	A-1	0-5	10-30	15-45	5-30	5-20	0-5	15-15	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Tecopa-----	0-1	Extremely gravelly sandy loam	GM, GP-GM	A-1	0	0-20	15-35	10-30	10-25	5-15	0-14	NP
	1-7	Very gravelly sandy loam, very gravelly loam	GM	A-1, A-2	0	0-30	25-50	25-50	20-40	10-35	0-14	NP
	7-17	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock Outcrop----	---	---	---	---	---	---	---	---	---	---	---	---
2090: Breko-----	0-6	Gravelly sandy loam	SM	A-1, A-2	0	0-5	65-80	55-75	35-60	15-35	15-25	NP-5
	6-21	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2	0	0	35-60	25-50	15-45	10-35	30-40	10-20
	21-29	Extremely gravelly sandy clay loam	GW-GC	A-2	0	0	25-40	10-25	10-20	5-10	30-40	10-20
	29-60	Stratified gravelly sandy loam to extremely gravelly loamy coarse sand	GP-GM	A-1	0	0	35-45	10-35	5-15	5-10	15-25	NP-5
Veet-----	0-5	Very gravelly sandy loam	SM	A-1	0	0-10	60-75	30-50	20-45	15-25	15-25	NP-5
	5-20	Very gravelly sandy loam	GC-GM, GC	A-2	0	10-25	40-60	35-55	25-50	15-25	20-25	5-10
	20-60	Stratified extremely gravelly sandy loam to very gravelly loamy coarse sand	GM, GP-GM	A-1	0	10-25	45-55	30-50	15-30	5-15	---	NP
2110: Pahrump-----	0-2	Fine sandy loam	SM	A-4	0	0	95-100	95-100	75-85	40-50	15-25	NP-5
	2-16	Stratified very fine sandy loam to loam	ML	A-4	0	0	95-100	85-100	80-95	60-70	20-25	NP-5
	16-42	Stratified very gravelly silt loam to very gravelly silty clay loam	GM	A-2	0	0	30-40	25-35	20-35	20-30	30-45	5-15
	42-60	Very fine sandy loam, silt loam	ML	A-4	0	0	95-100	85-100	80-95	50-60	15-25	NP-5
2121: Commski-----	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam, extremely gravelly fine sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-20	5-10	25-30	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
	In											
Arizo-----	0-8	Very gravelly loamy sand	GM, GP-GM	A-1	0	0-5	30-55	25-50	15-30	5-15	---	NP
	8-60	Stratified cobbly coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
2131: Upspring-----	0-2	Very gravelly sandy loam	GM	A-1	0	0-10	35-50	25-40	15-30	10-20	15-25	NP-5
	2-12	Very gravelly fine sandy loam, very gravelly sandy loam	GM	A-1	0	0-25	40-55	35-50	25-40	10-20	15-25	NP-5
	12-22	Unweathered bedrock			---	---	---	---	---	---	---	---
Shorim-----	0-3	Very gravelly sandy loam	GM	A-1, A-2	0	0-10	35-60	25-55	20-45	10-30	15-25	NP-5
	3-10	Gravelly sandy loam	SM	A-1	0	0-5	65-75	55-65	35-45	20-25	15-25	NP-5
	10-21	Very gravelly fine sandy loam, very gravelly sandy loam	GM, GW-GM, SM, SW-SM	A-1	0	0-10	30-65	25-55	15-40	5-20	15-25	NP-5
	21-24	Indurated			---	---	---	---	---	---	---	---
	24-30	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock Outcrop----	---	---	---	---	---	---	---	---	---	---	---	---
2140: Jonnic-----	0-2	Gravelly loam	GC-GM, GM, SC-SM, SM, SC	A-2, A-4	0	0-5	60-80	50-75	30-60	25-45	25-35	5-10
	2-21	Very gravelly clay loam, very gravelly clay	GC	A-2, A-7	0	5-15	45-60	35-50	25-45	25-40	40-60	15-30
	21-38	Extremely cobbly sandy clay loam	GC, GM, GP- GC, GP-GM	A-2	0-5	40-55	30-45	20-40	10-25	5-20	35-40	10-15
	38-42	Indurated			---	---	---	---	---	---	---	---
Niavi-----	0-2	Extremely cobbly fine sandy loam	GP-GC, GC-GM	A-1, A-2	0-5	30-60	15-45	10-35	10-30	5-15	20-25	5-10
	2-8	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GP-GC	A-1, A-2	0-5	10-30	15-55	10-45	5-35	5-20	20-25	5-10
	8-29	Stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam	GP, GP-GM	A-1	0-5	10-30	15-45	5-30	5-20	0-5	15-15	NP-5
	29-60	Stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam	GP, GP-GM	A-1	0-5	10-30	15-45	5-30	5-20	0-5	15-15	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2151: Arizo-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-40	10-20	15-20	NP-5
	8-60	Stratified cobbly coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
Bluepoint-----	0-9	Loamy fine sand	SM	A-2, A-4	0	0	100	100	75-85	25-45	---	NP
	9-17	Stratified fine sand to gravelly loamy fine sand	SM	A-2	0	0	70-100	60-90	55-85	10-30	---	NP
	17-41	Loamy fine sand, loamy sand, fine sand	SM	A-2, A-4	0	0	100	100	65-85	25-45	---	NP
	41-60	Stratified sand to very fine sandy loam	ML, SM	A-2, A-4	0	0	100	100	50-90	30-60	---	NP
Dune Land-----	0-6	Fine sand	SM, SP, SP-SM	A-2, A-3	0	0	100	100	60-80	0-25	0-14	NP
	6-60	Sand, fine sand	SM, SP, SP-SM	A-2, A-3	0	0	100	100	50-80	0-25	0-14	NP
2152: Arizo-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-40	10-20	15-20	NP-5
	8-60	Stratified cobbly coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
2153: Arizo-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-40	10-20	15-20	NP-5
	8-60	Stratified cobbly coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
Corbilt-----	0-4	Very gravelly sandy loam	GM	A-1	0	0-10	30-55	25-50	15-35	10-25	---	NP
	4-32	Gravelly fine sandy loam, gravelly sandy loam	SM	A-1, A-2, A-4	0	0	65-80	55-75	45-65	20-45	---	NP
	32-56	Very gravelly sandy loam	SM	A-1, A-2	0	10-25	60-70	50-60	35-55	20-30	---	NP
	56-60	Cemented			---	---	---	---	---	---	---	---
Commski-----	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam, extremely gravelly fine sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-20	5-10	25-30	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
	In				Pct	Pct					Pct	
2161: Casaga-----	0-1	Gravelly loam	CL, GC	A-6	0	0	65-75	55-70	50-70	45-60	30-35	10-15
	1-21	Clay loam	CL	A-6	0	0-5	90-100	85-100	80-95	65-75	35-40	15-20
	21-41	Very gravelly clay loam, gravelly clay loam	GC	A-2, A-6	0	0	30-60	25-55	25-50	20-40	35-40	15-20
	41-60	Stratified very gravelly sandy loam to gravelly clay loam	GC-GM, GM	A-1, A-2	0	0-5	40-60	35-55	25-35	10-20	15-25	NP-10
Nowoy-----	0-3	Gravelly loamy fine sand	SM	A-2	0	0	65-85	55-75	50-65	10-20	0-14	NP
	3-20	Very gravelly sandy loam	GM	A-1	0	0	40-55	35-50	25-45	15-25	0-14	NP
	20-60	Clay loam, silty clay loam	CL	A-6, A-7	0	0	100	100	90-95	60-85	35-50	15-25
2162: Casaga-----	0-1	Gravelly loam	GC-GM, SC-SM, GC	A-4	0	0-5	60-80	50-75	45-65	35-50	20-25	5-10
	1-21	Clay loam, gravelly clay loam	CL, GC	A-6	0	0-5	60-100	55-100	50-100	40-75	35-40	15-20
	21-41	Very gravelly clay loam	GC	A-2, A-6	0	0	30-55	25-50	20-45	15-40	35-40	15-20
	41-60	Stratified gravelly sandy loam to very gravelly sandy loam	GC-GM, GM	A-1	0	0-5	30-55	25-50	15-30	10-20	15-25	NP-5
Panor-----	0-1	Clay loam	CL	A-6, A-7	0	0	100	90-100	85-95	60-70	35-45	15-25
	1-5	Silt loam	ML	A-4	0	0	100	100	90-100	75-85	20-35	NP-10
	5-23	Clay loam	CL	A-6, A-7	0	0	100	100	90-100	65-75	35-45	15-25
	23-60	Gravelly clay loam	CL, GC, SC	A-6, A-7	0	0	65-80	55-75	50-65	40-55	35-45	15-25
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
2171: Sanwell-----	0-9	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	60-75	45-60	25-40	0-14	NP
	9-16	Gravelly sandy loam, gravelly fine sandy loam	SM	A-2, A-4	0	0-15	70-80	60-75	45-65	25-40	0-14	NP
	16-31	Very gravelly coarse sandy loam, very gravelly sandy loam	GM, SM	A-1	0	0	45-65	35-50	25-45	10-25	0-14	NP
	31-60	Very gravelly coarse sandy loam	GM	A-1	0	0	35-60	25-50	15-30	10-20	0-14	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2184: Skelon-----	0-4	Gravelly sandy loam	SM	A-1, A-2	0	0-5	60-80	50-75	40-60	15-35	0-14	NP
	4-28	Stratified very gravelly fine sandy loam to very gravelly coarse sandy loam	GM, GP-GM	A-1	0-5	0-10	35-55	30-50	15-35	10-20	0-14	NP
	28-44	Indurated			---	---	---	---	---	---	---	---
	44-52	Very gravelly sandy loam	GM	A-1	0-5	0-15	35-55	30-50	15-40	10-25	0-14	NP
	52-60	Extremely gravelly coarse sand	GP	A-1	0-5	10-25	20-35	15-30	5-15	0-5	0-14	NP
Bullfor-----	0-1	Gravelly loamy sand	SM	A-1, A-2	0	0	70-85	60-75	40-55	20-30	---	NP
	1-24	Loamy sand, fine sand	SM	A-2	0	0	90-100	85-100	55-80	20-30	---	NP
	24-25	Indurated			---	---	---	---	---	---	---	---
	25-60	Very gravelly sandy loam	GM	A-1	0	0	35-45	25-35	20-30	10-15	---	NP
2185: Skelon-----	0-4	Very gravelly sandy loam	GM	A-1	0	0-10	35-55	25-50	20-40	10-20	---	NP
	4-28	Stratified very gravelly fine sandy loam to very gravelly coarse sandy loam	GM, GP-GM	A-1	0	0-10	35-55	25-50	15-35	5-15	---	NP
	28-44	Indurated			---	---	---	---	---	---	---	---
	44-52	Very gravelly sandy loam	GM	A-1	0-5	0-15	35-55	30-50	15-40	10-25	---	NP
	52-60	Extremely gravelly coarse sand	GP	A-1	0-5	10-25	20-35	15-30	5-15	0-5	---	NP
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Ashmed-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	70-85	60-75	50-65	30-40	15-25	NP-5
	4-7	Gravelly silt loam	ML	A-4	0	0	70-80	60-75	55-70	50-60	25-30	NP-5
	7-24	Extremely gravelly sandy clay loam, extremely gravelly clay loam	GC, GP-GC	A-2	0	0-25	25-35	10-25	5-20	5-15	35-45	20-30
	24-32	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GP-GM	A-1	0-5	0-15	25-35	10-25	5-15	5-10	15-25	NP-5
	32-60	Very gravelly coarse sandy loam, extremely gravelly sandy loam	GM, GP-GM	A-1	0	0-10	20-40	15-35	10-25	5-15	15-25	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
					>10 inches	3-10 inches	4	10	40	200		
			Unified	AASHTO	Pct	Pct					Pct	
	In				Pct	Pct					Pct	
Arizo-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-40	10-20	15-20	NP-5
	8-60	Stratified cobble coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
2201: Corbilt-----	0-4	Very gravelly sandy loam	GM	A-1	0	0-10	30-55	25-50	15-35	10-25	---	NP
	4-32	Gravelly fine sandy loam, gravelly sandy loam	SM	A-1, A-2, A-4	0	0	65-80	55-75	45-65	20-45	---	NP
	32-56	Very gravelly sandy loam	SM	A-1, A-2	0	10-25	60-70	50-60	35-55	20-30	---	NP
	56-60	Cemented			---	---	---	---	---	---	---	---
Arizo-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-40	10-20	15-20	NP-5
	8-60	Stratified cobble coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
2202: Corbilt-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	55-75	50-65	20-45	---	NP
	4-32	Gravelly fine sandy loam, gravelly sandy loam	SM	A-1, A-2, A-4	0	0	65-80	55-75	45-65	20-45	---	NP
	32-56	Very gravelly sandy loam	SM	A-1, A-2	0	10-25	60-70	50-60	35-55	20-30	---	NP
	56-60	Cemented			---	---	---	---	---	---	---	---
Migern-----	0-3	Gravelly sandy loam	SM	A-1, A-2	0	0	75-90	60-75	40-55	20-35	0-14	NP
	3-8	Gravelly clay loam, gravelly sandy clay loam	SC	A-6, A-7	0	0	75-90	50-75	45-60	35-50	30-50	10-25
	8-60	Gravelly loamy sand, gravelly sand	SM, SP-SM	A-1	0	0	70-85	50-75	10-30	5-20	0-14	NP
Arizo-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-40	10-20	15-20	NP-5
	8-60	Stratified cobble coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
2204: Corbilt-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	55-75	50-65	20-45	---	NP
	4-32	Gravelly fine sandy loam, gravelly sandy loam	SM	A-1, A-2, A-4	0	0	65-80	55-75	45-65	20-45	---	NP
	32-56	Very gravelly sandy loam	SM	A-1, A-2	0	10-25	60-70	50-60	35-55	20-30	---	NP
	56-60	Cemented			---	---	---	---	---	---	---	---

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Wodavar-----	0-3	Extremely gravelly fine sandy loam	GM, GP-GM	A-1	0	0	25-35	15-25	10-20	5-15	15-25	NP-5
	3-16	Very gravelly sandy loam	GM	A-1, A-2	0	0	35-60	25-50	20-40	10-30	15-25	NP-5
	16-33	Indurated			---	---	---	---	---	---	---	---
	33-60	Very gravelly loam	GM	A-1	0	0	35-60	25-50	20-45	20-25	20-25	NP-5
Sanwell-----	0-9	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	60-75	45-60	25-40	0-14	NP
	9-16	Gravelly sandy loam, gravelly fine sandy loam	SM	A-2, A-4	0	0-15	70-80	60-75	45-65	25-40	0-14	NP
	16-31	Very gravelly coarse sandy loam, very gravelly sandy loam	GM, SM	A-1	0	0	45-65	35-50	25-45	10-25	0-14	NP
	31-60	Very gravelly coarse sandy loam	GM	A-1	0	0	35-60	25-50	15-30	10-20	0-14	NP
2212: Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GM, GC-GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Bullfor-----	0-1	Gravelly loamy sand	SM	A-1, A-2	0	0	70-85	60-75	40-55	20-30	---	NP
	1-24	Loamy sand, fine sand	SM	A-2	0	0	90-100	85-100	55-80	20-30	---	NP
	24-25	Indurated			---	---	---	---	---	---	---	---
	25-60	Very gravelly sandy loam	GM	A-1	0	0	35-45	25-35	20-30	10-15	---	NP
2214: Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Arizo-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-40	10-20	15-20	NP-5
	8-60	Stratified cobble coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
2215: Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Greyeagle-----	0-3	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	30-55	25-50	15-30	5-20	20-25	NP-5
	3-6	Gravelly sandy loam	SM	A-1, A-2	0	0	60-75	50-65	30-45	15-30	20-25	NP-5
	6-8	Very gravelly sandy loam, very gravelly loamy sand	GM, GW-GM	A-1	0	0	30-55	25-50	15-35	5-20	20-25	NP-5
	8-24	Indurated			---	---	---	---	---	---	---	---
	24-60	Stratified extremely cobble loamy sand to very gravelly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0	25-65	30-65	25-60	15-30	5-15	0-14	NP
2216: Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Arizo-----	0-8	Very gravelly loamy sand	GM, GP-GM	A-1	0	0-5	30-55	25-50	15-30	5-15	---	NP
	8-60	Stratified cobble coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
2218: Sanwell-----	0-9	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	60-75	45-60	25-40	0-14	NP
	9-16	Gravelly sandy loam, gravelly fine sandy loam	SM	A-2, A-4	0	0-15	70-80	60-75	45-65	25-40	0-14	NP
	16-31	Very gravelly coarse sandy loam, very gravelly sandy loam	GM, SM	A-1	0	0	45-65	35-50	25-45	10-25	0-14	NP
	31-60	Very gravelly coarse sandy loam	GM	A-1	0	0	35-60	25-50	15-30	10-20	0-14	NP
Commski-----	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-15	5-10	25-30	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2220: Canoto-----	0-11	Very gravelly loam	GC, GC-GM, GM	A-1, A-2	0	0-15	30-55	25-50	20-45	15-35	15-25	NP-10
	11-60	Stratified gravelly loam to extremely gravelly loamy coarse sand	GM	A-1	0	0-15	30-55	25-50	15-35	10-25	15-25	NP-5
Arizo-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-40	10-20	15-20	NP-5
	8-60	Stratified cobble coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
2221: Sanwell-----	0-9	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	60-75	45-60	25-40	0-14	NP
	9-16	Gravelly sandy loam, gravelly fine sandy loam	SM	A-2, A-4	0	0-15	70-80	60-75	45-65	25-40	0-14	NP
	16-31	Very gravelly coarse sandy loam, very gravelly sandy loam	GM, SM	A-1	0	0	45-65	35-50	25-45	10-25	0-14	NP
	31-60	Very gravelly coarse sandy loam	GM	A-1	0	0	35-60	25-50	15-30	10-20	0-14	NP
Greyeagle-----	0-3	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	30-55	25-50	15-30	5-20	20-25	NP-5
	3-6	Gravelly sandy loam	SM	A-1, A-2	0	0	60-75	50-65	30-45	15-30	20-25	NP-5
	6-8	Very gravelly sandy loam, very gravelly loamy sand	GM, GW-GM	A-1	0	0	30-55	25-50	15-35	5-20	20-25	NP-5
	8-24	Indurated			---	---	---	---	---	---	---	---
	24-60	Stratified extremely cobble loamy sand to very gravelly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0	25-65	30-65	25-60	15-30	5-15	0-14	NP
2222: Niavi-----	0-2	Extremely cobble fine sandy loam	GC-GM, GP-GC	A-1, A-2	0-5	30-60	15-45	10-35	10-30	5-15	20-25	5-10
	2-8	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GP-GC	A-1, A-2	0-5	10-30	15-55	10-45	5-35	5-20	20-25	5-10
	8-29	Stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam	GP, GP-GM	A-1	0-5	10-30	15-45	5-30	5-20	0-5	15-15	NP-5
	29-60	Stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam	GP, GP-GM	A-1	0-5	10-30	15-45	5-30	5-20	0-5	15-15	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
	In				Pct	Pct					Pct	
Jonnic-----	0-2	Gravelly loam	GC-GM, GM, SC-SM, SM, SC	A-2, A-4	0	0-5	60-80	50-75	30-60	25-45	25-35	5-10
	2-21	Very gravelly clay loam, very gravelly clay	GC	A-2, A-7	0	5-15	45-60	35-50	25-45	25-40	40-60	15-30
	21-38	Extremely cobbley sandy clay loam	GC, GM, GP- GC, GP-GM	A-2	0-5	40-55	30-45	20-40	10-25	5-20	35-40	10-15
	38-42	Indurated			---	---	---	---	---	---	---	---
2230: Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Skelon-----	0-4	Gravelly sandy loam	SM	A-1, A-2	0	0-5	60-80	50-75	40-60	15-35	0-14	NP
	4-28	Stratified very gravelly fine sandy loam to very gravelly coarse sandy loam	GM, GP-GM	A-1	0-5	0-10	35-55	30-50	15-35	10-20	0-14	NP
	28-44	Indurated			---	---	---	---	---	---	---	---
	44-52	Very gravelly sandy loam	GM	A-1	0-5	0-15	35-55	30-50	15-40	10-25	0-14	NP
	52-60	Extremely gravelly coarse sand	GP	A-1	0-5	10-25	20-35	15-30	5-15	0-5	0-14	NP
2233: Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Skelon-----	0-4	Gravelly sandy loam	SM	A-1, A-2	0	0-5	60-80	50-75	40-60	15-35	0-14	NP
	4-28	Stratified very gravelly fine sandy loam to very gravelly coarse sandy loam	GM, GP-GM	A-1	0-5	0-10	35-55	30-50	15-35	10-20	0-14	NP
	28-44	Indurated			---	---	---	---	---	---	---	---
	44-52	Very gravelly sandy loam	GM	A-1	0-5	0-15	35-55	30-50	15-40	10-25	0-14	NP
	52-60	Extremely gravelly coarse sand	GP	A-1	0-5	10-25	20-35	15-30	5-15	0-5	0-14	NP
Bluepoint-----	0-9	Loamy fine sand	SM	A-2, A-4	0	0	100	100	75-85	25-45	---	NP
	9-17	Stratified fine sand to gravelly loamy fine sand	SM	A-2	0	0	70-100	60-90	55-85	10-30	---	NP
	17-41	Loamy fine sand, loamy sand, fine sand	SM	A-2, A-4	0	0	100	100	65-85	25-45	---	NP
	41-60	Stratified sand to very fine sandy loam	ML, SM	A-2, A-4	0	0	100	100	50-90	30-60	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index	
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200			
					Pct	Pct							
2250: Tokoper-----	In				Pct	Pct					Pct		
	0-3	Very cobbly sandy loam	GM, SM	A-1, A-2	0-5	30-45	55-75	45-70	30-45	20-30	15-25	NP-5	
	3-9	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2, A-6	0-5	10-25	50-60	40-55	30-45	20-40	30-40	10-15	
	9-14	Very gravelly loam, extremely gravelly loam, very gravelly sandy loam	GC-GM, GM, GW-GC, GW-GM	A-2	0-5	25-40	30-50	20-40	10-30	5-25	25-35	5-10	
	14-15	Indurated			---	---	---	---	---	---	---	---	
	15-25	Unweathered bedrock			---	---	---	---	---	---	---	---	
	Upspring-----	0-2	Very gravelly sandy loam	GM	A-1	0	0-10	35-50	25-40	15-30	10-20	15-25	NP-5
2-12		Very gravelly fine sandy loam, very gravelly sandy loam	GM	A-1	0	0-25	40-55	35-50	25-40	10-20	15-25	NP-5	
12-22		Unweathered bedrock			---	---	---	---	---	---	---	---	
Rock Outcrop----	---	---	---	---	---	---	---	---	---	---	---		
2251: Tokoper-----	0-3	Very cobbly sandy loam	GM, SM	A-1, A-2	0-5	30-45	55-75	45-70	30-45	20-30	15-25	NP-5	
	3-9	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2, A-6	0-5	10-25	50-60	40-55	30-45	20-40	30-40	10-15	
	9-14	Very gravelly loam, extremely gravelly loam, very gravelly sandy loam	GC-GM, GM, GW-GC, GW-GM	A-2	0-5	25-40	30-50	20-40	10-30	5-25	25-35	5-10	
	14-15	Indurated			---	---	---	---	---	---	---	---	
	15-25	Unweathered bedrock			---	---	---	---	---	---	---	---	
	Downeyville-----	0-4	Very gravelly fine sandy loam	SC-SM, SM	A-1, A-2	0	5-20	60-70	30-55	25-45	15-30	15-25	NP-10
		4-9	Very gravelly loam, very gravelly fine sandy loam	GC	A-2, A-6	0-5	10-25	40-60	30-50	25-50	20-40	25-35	10-15
9-13		Unweathered bedrock			---	---	---	---	---	---	---	---	

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Pintwater-----	0-3	Very gravelly fine sandy loam	GM, SM	A-1, A-2	0-5	10-30	45-75	40-65	30-50	15-30	20-25	NP-5
	3-11	Very stony fine sandy loam, very cobbly sandy loam, extremely gravelly sandy loam	GM	A-1	5-15	30-45	35-60	30-50	15-35	10-20	20-25	NP-5
	11-15	Unweathered bedrock			---	---	---	---	---	---	---	---
2252: Tokoper-----	0-3	Very cobbly sandy loam	GM, SM	A-1, A-2	0-5	30-45	55-75	45-70	30-45	20-30	15-25	NP-5
	3-9	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2, A-6	0-5	10-25	50-60	40-55	30-45	20-40	30-40	10-15
	9-14	Very gravelly loam, extremely gravelly loam, very gravelly sandy loam	GC-GM, GM, GW-GC, GW-GM	A-2	0-5	25-40	30-50	20-40	10-30	5-25	25-35	5-10
	14-15	Indurated			---	---	---	---	---	---	---	---
	15-25	Unweathered bedrock			---	---	---	---	---	---	---	---
Blacktop-----	0-7	Very stony fine sandy loam	GM	A-1	15-25	15-25	35-65	30-60	20-40	10-25	20-30	NP-5
	7-17	Unweathered bedrock			---	---	---	---	---	---	---	---
2253: Tokoper-----	0-3	Very cobbly sandy loam	GM, SM	A-1, A-2	0-5	30-45	55-75	45-70	30-45	20-30	15-25	NP-5
	3-9	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2, A-6	0-5	10-25	50-60	40-55	30-45	20-40	30-40	10-15
	9-14	Very gravelly loam, extremely gravelly loam, very gravelly sandy loam	GC-GM, GM, GW-GC, GW-GM	A-2	0-5	25-40	30-50	20-40	10-30	5-25	25-35	5-10
	14-15	Indurated			---	---	---	---	---	---	---	---
	15-25	Unweathered bedrock			---	---	---	---	---	---	---	---
Ardivey-----	0-3	Very gravelly sandy loam	GC-GM	A-2	0	0-15	30-55	25-50	15-30	10-20	20-25	5-10
	3-14	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2	0-5	10-25	40-55	30-45	20-40	15-30	25-40	10-20
	14-60	Extremely gravelly loamy sand	GW, GW-GM	A-1	0-10	10-45	15-35	10-30	5-20	0-10	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

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TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
Yermo-----	In											
	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Dedas-----	0-3	Very gravelly sandy loam	GM	A-1	0	0-5	40-55	25-50	15-30	10-20	0-14	NP
	3-15	Very gravelly sandy loam, very gravelly coarse sandy loam, very gravelly loam	GC-GM, GM, GW-GC, GW-GM	A-1, A-2	0	0-5	40-55	25-50	15-40	5-30	20-30	NP-10
	15-17	Indurated			---	---	---	---	---	---	---	---
	17-27	Unweathered bedrock			---	---	---	---	---	---	---	---
2263: Greyeagle-----	0-3	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	30-55	25-50	15-30	5-20	20-25	NP-5
	3-6	Gravelly sandy loam	SM	A-1, A-2	0	0	60-75	50-65	30-45	15-30	20-25	NP-5
	6-8	Very gravelly sandy loam, very gravelly loamy sand	GM, GW-GM	A-1	0	0	30-55	25-50	15-35	5-20	20-25	NP-5
	8-24	Indurated			---	---	---	---	---	---	---	---
	24-60	Stratified extremely cobblely loamy sand to very gravelly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0	25-65	30-65	25-60	15-30	5-15	0-14	NP
Sanwell-----	0-9	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	60-75	45-60	25-40	0-14	NP
	9-16	Gravelly sandy loam, gravelly fine sandy loam	SM	A-2, A-4	0	0-15	70-80	60-75	45-65	25-40	0-14	NP
	16-31	Very gravelly coarse sandy loam, very gravelly sandy loam	GM, SM	A-1	0	0	45-65	35-50	25-45	10-25	0-14	NP
	31-60	Very gravelly coarse sandy loam	GM	A-1	0	0	35-60	25-50	15-30	10-20	0-14	NP
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2266: Greyeagle-----	0-3	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	30-55	25-50	15-30	5-20	20-25	NP-5
	3-6	Gravelly sandy loam	SM	A-1, A-2	0	0	60-75	50-65	30-45	15-30	20-25	NP-5
	6-8	Very gravelly sandy loam, very gravelly loamy sand	GM, GW-GM	A-1	0	0	30-55	25-50	15-35	5-20	20-25	NP-5
	8-24	Indurated			---	---	---	---	---	---	---	---
	24-60	Stratified extremely cobbly loamy sand to very gravelly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0	25-65	30-65	25-60	15-30	5-15	0-14	NP
2267: Greyeagle-----	0-3	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	30-55	25-50	15-30	5-20	20-25	NP-5
	3-6	Gravelly sandy loam	SM	A-1, A-2	0	0	60-75	50-65	30-45	15-30	20-25	NP-5
	6-8	Very gravelly sandy loam, very gravelly loamy sand	GM, GW-GM	A-1	0	0	30-55	25-50	15-35	5-20	20-25	NP-5
	8-24	Indurated			---	---	---	---	---	---	---	---
	24-60	Stratified extremely cobbly loamy sand to very gravelly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0	25-65	30-65	25-60	15-30	5-15	0-14	NP
Skelon-----	0-4	Very gravelly sandy loam	GM	A-1	0	0-10	35-55	25-50	20-40	10-20	---	NP
	4-28	Stratified very gravelly fine sandy loam to very gravelly coarse sandy loam	GM, GP-GM	A-1	0	0-10	35-55	25-50	15-35	5-15	---	NP
	28-44	Indurated			---	---	---	---	---	---	---	---
	44-52	Very gravelly sandy loam	GM	A-1	0-5	0-15	35-55	30-50	15-40	10-25	---	NP
	52-60	Extremely gravelly coarse sand	GP	A-1	0-5	10-25	20-35	15-30	5-15	0-5	---	NP
2268: Greyeagle-----	0-3	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	30-55	25-50	15-30	5-20	20-25	NP-5
	3-6	Gravelly sandy loam	SM	A-1, A-2	0	0	60-75	50-65	30-45	15-30	20-25	NP-5
	6-8	Very gravelly sandy loam, very gravelly loamy sand	GM, GW-GM	A-1	0	0	30-55	25-50	15-35	5-20	20-25	NP-5
	8-24	Indurated			---	---	---	---	---	---	---	---
	24-60	Stratified extremely cobbly loamy sand to very gravelly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0	25-65	30-65	25-60	15-30	5-15	0-14	NP
Arizo-----	0-8	Very gravelly loamy sand	GM, GP-GM	A-1	0	0-5	30-55	25-50	15-30	5-15	---	NP
	8-60	Stratified cobbly coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2269: Greyeagle-----	0-3	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	30-55	25-50	15-30	5-20	20-25	NP-5
	3-6	Gravelly sandy loam	SM	A-1, A-2	0	0	60-75	50-65	30-45	15-30	20-25	NP-5
	6-8	Very gravelly sandy loam, very gravelly loamy sand	GM, GW-GM	A-1	0	0	30-55	25-50	15-35	5-20	20-25	NP-5
	8-24	Indurated			---	---	---	---	---	---	---	---
	24-60	Stratified extremely cobble loamy sand to very gravelly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0	25-65	30-65	25-60	15-30	5-15	0-14	NP
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Strozi-----	0-5	Gravelly fine sandy loam	GM, SM	A-1, A-2	0	0	60-85	50-75	40-65	20-35	15-25	NP-5
	5-13	Clay loam	CL	A-6	0	0	85-100	75-95	65-75	50-60	35-40	15-20
	13-32	Very gravelly sandy loam	GM, GW-GM	A-1	0	0	35-60	25-50	15-35	5-20	0-14	NP
	32-33	Cemented			---	---	---	---	---	---	---	---
	33-60	Very gravelly sandy loam	GM, GW-GM	A-1	0	0	35-55	25-50	15-35	5-20	0-14	NP
2270: Bluepoint-----	0-9	Loamy fine sand	SM	A-2, A-4	0	0	100	100	75-85	25-45	---	NP
	9-24	Stratified fine sand to gravelly loamy fine sand	SM	A-2	0	0	70-100	60-90	55-85	10-30	---	NP
	24-41	Loamy fine sand, loamy sand, fine sand	SM	A-2, A-4	0	0	100	100	65-85	25-45	---	NP
	41-60	Stratified sand to very fine sandy loam	ML, SM	A-2, A-4	0	0	100	100	50-90	30-60	---	NP
2271: Kawich-----	0-2	Fine sand	SM	A-2	0	0	100	100	75-90	15-30	---	NP
	2-60	Fine sand	SM	A-2	0	0	100	100	75-90	15-30	---	NP
Corbilt-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	55-75	50-65	20-45	---	NP
	4-32	Gravelly fine sandy loam, gravelly sandy loam	SM	A-1, A-2, A-4	0	0	65-80	55-75	45-65	20-45	---	NP
	32-56	Very gravelly sandy loam	SM	A-1, A-2	0	10-25	60-70	50-60	35-55	20-30	---	NP
	56-60	Cemented			---	---	---	---	---	---	---	---
Wanomie-----	0-2	Sandy loam	SM	A-4	0	0	95-100	85-100	60-70	35-45	---	NP
	2-30	Stratified coarse sandy loam to loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	85-100	60-75	35-65	15-25	NP-10
	30-31	Cemented			---	---	---	---	---	---	---	---
	31-60	Coarse sandy loam, sandy loam	SM	A-4	0	0	95-100	85-100	60-70	35-45	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

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TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

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TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

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TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

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TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2320:												
Wahguyhe-----	0-2	Very gravelly sandy loam	GM	A-1	0	0-5	40-55	30-50	25-35	10-25	15-25	NP-5
	2-16	Very gravelly sandy loam	GM	A-1	0-5	0-20	30-55	25-50	20-35	10-25	15-25	NP-5
	16-20	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock Outcrop----	---	---	---	---	---	---	---	---	---	---	---	---
Gabbvally-----	0-4	Very gravelly sandy loam	GM	A-1	0	0-10	50-60	35-45	25-40	15-25	20-25	NP-5
	4-12	Very gravelly sandy clay loam, very gravelly sandy loam, very gravelly loam	GC, GC-GM	A-2	0-5	0-15	50-60	35-50	25-35	15-25	25-35	5-15
	12-16	Unweathered bedrock			---	---	---	---	---	---	---	---
2341:												
Naye-----	0-7	Gravelly fine sandy loam	GM, SM	A-1, A-2	0	0-10	60-80	55-75	40-60	20-35	15-25	NP-5
	7-25	Very gravelly fine sandy loam, very gravelly sandy loam	GM	A-1	0	0-15	35-55	25-50	20-40	10-25	15-25	NP-5
	25-39	Indurated			---	---	---	---	---	---	---	---
2372:												
Zalda-----	0-3	Gravelly sandy loam	GM, SM	A-1, A-2	0	0-10	60-80	50-75	40-55	15-30	15-25	NP-5
	3-7	Sandy loam, loam, gravelly sandy loam	SM	A-2, A-4	0	0-10	75-95	70-90	55-70	25-50	15-25	NP-5
	7-8	Indurated			---	---	---	---	---	---	---	---
	8-18	Unweathered bedrock			---	---	---	---	---	---	---	---
Bluepoint-----	0-9	Loamy fine sand	SM	A-2, A-4	0	0	100	100	75-85	25-45	---	NP
	9-17	Stratified fine sand to gravelly loamy fine sand	SM	A-2	0	0	70-100	60-90	55-85	10-30	---	NP
	17-41	Loamy fine sand, loamy sand, fine sand	SM	A-2, A-4	0	0	100	100	65-85	25-45	---	NP
	41-60	Stratified sand to very fine sandy loam	ML, SM	A-2, A-4	0	0	100	100	50-90	30-60	---	NP
Rock Outcrop----	---	---	---	---	---	---	---	---	---	---	---	---
2373:												
Zalda-----	0-3	Gravelly sandy loam	GM, SM	A-1, A-2	0	0-10	60-80	50-75	40-55	15-30	15-25	NP-5
	3-7	Sandy loam, loam, gravelly sandy loam	SM	A-4, A-2	0	0-10	75-95	70-90	55-70	25-50	15-25	NP-5
	7-8	Indurated			---	---	---	---	---	---	---	---
	8-18	Unweathered bedrock			---	---	---	---	---	---	---	---
Rubble Land-----	0-60	Fragmental material	GW	A-1	30-65	30-65	0-10	0-5	0-5	0	0-14	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Skelon-----	0-4	Very gravelly sandy loam	GM	A-1	0	0-10	35-55	25-50	20-40	10-20	---	NP
	4-28	Stratified very gravelly fine sandy loam to very gravelly coarse sandy loam	GM, GP-GM	A-1	0	0-10	35-55	25-50	15-35	5-15	---	NP
	28-44	Indurated			---	---	---	---	---	---	---	---
	44-52	Very gravelly sandy loam	GM	A-1	0-5	0-15	35-55	30-50	15-40	10-25	---	NP
	52-60	Extremely gravelly coarse sand	GP	A-1	0-5	10-25	20-35	15-30	5-15	0-5	---	NP
2381: Armpup-----	0-3	Very gravelly sandy clay loam	GC	A-2	0	0-5	40-55	35-50	25-40	20-30	30-40	10-20
	3-18	Gravelly clay, gravelly clay loam	CH, CL, GC	A-7	0	0	60-80	55-75	45-65	35-55	45-55	20-30
	18-46	Very gravelly sandy clay, extremely gravelly sandy clay	GC	A-2	0	5-10	30-45	20-35	15-35	10-25	45-55	20-30
	46-55	Very gravelly loamy sand, very gravelly sandy loam	GM	A-1	0	5-10	30-60	25-50	20-40	10-25	---	NP
	55-59	Weathered bedrock			---	---	---	---	---	---	---	---
Ashmed-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	70-85	60-75	50-65	30-40	15-25	NP-5
	4-7	Gravelly silt loam	ML	A-4	0	0	70-80	60-75	55-70	50-60	25-30	NP-5
	7-24	Extremely gravelly sandy clay loam, extremely gravelly clay loam	GC, GP-GC	A-2	0	0-25	25-35	10-25	5-20	5-15	35-45	20-30
	24-32	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GP-GM	A-1	0-5	0-15	25-35	10-25	5-15	5-10	15-25	NP-5
	32-60	Very gravelly coarse sandy loam, extremely gravelly sandy loam	GM, GP-GM	A-1	0	0-10	20-40	15-35	10-25	5-15	15-25	NP-5
2391: Commski-----	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-15	5-10	25-30	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Ashmed-----	0-4	Extremely gravelly sandy loam	GP-GM	A-1	0	0-5	25-35	10-25	5-15	5-10	15-25	NP-5
	4-7	Gravelly silt loam	ML	A-4	0	0	70-80	60-75	55-70	50-60	25-30	NP-5
	7-24	Extremely gravelly sandy clay loam, extremely gravelly clay loam	GC, GP-GC	A-2	0	0-25	25-35	10-25	5-20	5-15	35-45	20-30
	24-32	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GP-GM	A-1	0-5	0-15	25-35	10-25	5-15	5-10	15-25	NP-5
	32-60	Very gravelly coarse sandy loam, extremely gravelly sandy loam	GM, GP-GM	A-1	0	0-10	20-40	15-35	10-25	5-15	15-25	NP-5
2392: Commski-----	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam, extremely gravelly fine sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-20	5-10	25-30	NP-5
Ashmed-----	0-4	Extremely gravelly sandy loam	GP-GM	A-1	0	0-5	25-35	10-25	5-15	5-10	15-25	NP-5
	4-7	Gravelly silt loam	ML	A-4	0	0	70-80	60-75	55-70	50-60	25-30	NP-5
	7-24	Extremely gravelly sandy clay loam, extremely gravelly clay loam	GC, GP-GC	A-2	0	0-25	25-35	10-25	5-20	5-15	35-45	20-30
	24-32	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GP-GM	A-1	0-5	0-15	25-35	10-25	5-15	5-10	15-25	NP-5
	32-60	Very gravelly coarse sandy loam, extremely gravelly sandy loam	GM, GP-GM	A-1	0	0-10	20-40	15-35	10-25	5-15	15-25	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct					Pct	
2393: Commski-----	In											
	0-5	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam, extremely gravelly fine sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-20	5-10	25-30	NP-5
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
2400: Mobl-----	0-2	Very gravelly fine sandy loam	GM	A-1, A-2	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	2-7	Sandy clay loam, clay loam	SC	A-2, A-6, A-7	0	0	85-100	85-100	45-60	30-50	30-45	10-20
	7-17	Sandy loam	SM	A-2, A-4	0	0	90-100	85-100	55-75	25-40	15-25	NP-5
	17-60	Stratified sandy loam to extremely gravelly loamy sand	GM, SM	A-1	0	0-5	40-80	30-65	20-50	10-25	15-25	NP-5
Scottcas-----	0-2	Very gravelly sandy loam	GM	A-1	0	0-15	35-55	30-50	20-35	10-20	15-20	NP-5
	2-7	Very gravelly sandy clay loam, very gravelly clay loam, very gravelly loam	GC	A-2	0	0-15	35-55	30-50	25-45	15-35	30-40	10-15
	7-15	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GP-GM	A-1	0	0-5	15-30	10-25	10-20	5-10	15-20	NP-5
	15-21	Very gravelly loamy coarse sand	GM, GP-GM	A-1	0	0-5	30-50	25-45	10-25	5-15	---	NP
	21-60	Stratified extremely gravelly loamy coarse sand to extremely gravelly sandy loam	GP	A-1	0	0-20	15-30	10-25	5-15	0-5	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2401: Skelon-----	0-4	Very gravelly sandy loam	GM	A-1	0	0-10	35-55	25-50	20-40	10-20	---	NP
	4-28	Stratified very gravelly fine sandy loam to very gravelly coarse sandy loam	GM, GP-GM	A-1	0	0-10	35-55	25-50	15-35	5-15	---	NP
	28-44	Indurated			---	---	---	---	---	---	---	---
	44-52	Very gravelly sandy loam	GM	A-1	0-5	0-15	35-55	30-50	15-40	10-25	---	NP
	52-60	Extremely gravelly coarse sand	GP	A-1	0-5	10-25	20-35	15-30	5-15	0-5	---	NP
Bacho-----	0-3	Very gravelly sandy loam	GM	A-1	0-5	0-15	30-55	25-50	15-35	10-25	15-25	NP-5
	3-11	Very gravelly sandy clay, very gravelly clay	GC, GM	A-2	0-5	0-10	30-55	25-50	20-45	10-35	40-55	15-25
	11-36	Indurated			---	---	---	---	---	---	---	---
2421: Orwash-----	0-3	Gravelly sandy loam	SM	A-1, A-2	0	0-5	85-95	55-70	35-60	20-30	---	NP
	3-18	Stratified gravelly coarse sandy loam to very gravelly loamy coarse sand	SM	A-1	0	0-10	85-95	55-75	25-35	10-20	---	NP
	18-60	Stratified gravelly coarse sand to very gravelly loamy coarse sand	SM, SP-SM	A-1	0	0	85-95	50-65	25-35	5-15	---	NP
Wilst-----	0-4	Very gravelly sandy loam	GP-GM	A-1	0	0-5	40-55	25-45	15-30	5-10	15-25	NP-5
	4-10	Gravelly sandy loam	SM	A-1	0	0-5	60-80	50-75	35-50	15-20	15-25	NP-5
	10-33	Very gravelly sandy loam	GM, GP-GM	A-1	0	0-5	40-55	25-50	15-40	5-15	15-25	NP-5
	33-43	Unweathered bedrock			---	---	---	---	---	---	---	---
Agon-----	0-3	Very gravelly loamy sand	GM	A-1	0	0-5	40-50	35-45	20-30	10-15	---	NP
	3-32	Gravelly loamy sand, gravelly sand	SM, SW-SM	A-1, A-2, A-3	0	0	55-80	50-75	40-60	5-20	---	NP
	32-33	Indurated			---	---	---	---	---	---	---	---
	33-37	Unweathered bedrock			---	---	---	---	---	---	---	---
2422: Orwash-----	0-3	Gravelly sandy loam	SM	A-1, A-2	0	0-5	85-95	55-70	35-60	20-30	---	NP
	3-18	Stratified gravelly coarse sandy loam to very gravelly loamy coarse sand	SM	A-1	0	0-10	85-95	55-75	25-35	10-20	---	NP
	18-60	Stratified gravelly coarse sand to very gravelly loamy coarse sand	SM, SP-SM	A-1	0	0	85-95	50-65	25-35	5-15	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Louderback-----	0-3	Loamy sand	SM	A-1, A-2	0	0	95-100	85-100	45-60	10-25	0-14	NP
	3-40	Stratified sand to silt loam	SM, SP-SM	A-2, A-3	0	0	100	100	50-60	5-15	0-14	NP
	40-60	Stratified gravelly coarse sand to very gravelly loamy coarse sand	SM, SP-SM	A-1	0	0	85-95	50-65	25-35	5-15	---	NP
Arizo-----	0-8	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-40	10-20	15-20	NP-5
	8-60	Stratified cobble coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP
2423: Orwash-----	0-3	Gravelly sandy loam	SM	A-1, A-2	0	0-5	85-95	55-70	35-60	20-30	---	NP
	3-18	Stratified gravelly coarse sandy loam to very gravelly loamy coarse sand	SM	A-1	0	0-10	85-95	55-75	25-35	10-20	---	NP
	18-60	Stratified gravelly coarse sand to very gravelly loamy coarse sand	SM, SP-SM	A-1	0	0	85-95	50-65	25-35	5-15	---	NP
Greyeagle-----	0-3	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	30-55	25-50	15-30	5-20	20-25	NP-5
	3-6	Gravelly sandy loam	SM	A-1, A-2	0	0	60-75	50-65	30-45	15-30	20-25	NP-5
	6-8	Very gravelly sandy loam, very gravelly loamy sand	GM, GW-GM	A-1	0	0	30-55	25-50	15-35	5-20	20-25	NP-5
	8-24	Indurated			---	---	---	---	---	---	---	---
	24-60	Stratified extremely cobble loamy sand to very gravelly loamy sand	GM, GP-GM, SM, SP-SM	A-1	0	25-65	30-65	25-60	15-30	5-15	0-14	NP
Wanomie-----	0-2	Very gravelly sandy loam	GM, GP-GM, SM, SP-SM	A-1	0	0-5	35-60	25-50	15-30	5-15	---	NP
	2-30	Stratified coarse sandy loam to loam	CL-ML, ML, SC-SM, SM	A-4	0	0	95-100	85-100	60-75	35-65	15-25	NP-10
	30-31	Cemented			---	---	---	---	---	---	---	---
	31-60	Coarse sandy loam, sandy loam	SM	A-4	0	0	95-100	85-100	60-70	35-45	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2437: Cruzspring-----	0-1	Extremely gravelly sandy loam	GP-GM, GM, GP-GC	A-1	0-3	5-15	20-45	10-30	5-25	5-15	20-25	NP-5
	1-3	Very gravelly sandy loam, very gravelly fine sandy loam	GM, SM, GC-GM	A-1	0-3	5-15	40-70	30-50	20-40	15-25	20-25	NP-5
	3-10	Very gravelly loam, extremely gravelly sandy loam, very gravelly sandy loam, extremely gravelly loam	GC-GM, GP-GC	A-1, A-2	0-1	5-30	15-50	10-40	10-30	5-20	25-30	5-10
	10-13	Weathered bedrock			---	---	---	---	---	---	---	---
	13-17	Unweathered bedrock			---	---	---	---	---	---	---	---
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	---	---	---
2441: Lewdlac-----	0-3	Gravelly loamy fine sand	SM	A-1, A-2	0	0	60-80	50-75	40-60	15-25	---	NP
	3-16	Fine sandy loam, sandy loam	SM	A-4	0	0	85-95	75-90	55-70	35-50	---	NP
	16-21	Cemented			---	---	---	---	---	---	---	---
	21-60	Stratified gravelly loam to extremely gravelly clay	GC	A-2, A-6	0	0-10	25-60	20-55	15-45	10-40	25-40	10-20
Sanwell-----	0-9	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	60-75	45-60	25-40	0-14	NP
	9-16	Gravelly sandy loam, gravelly fine sandy loam	SM	A-2, A-4	0	0-15	70-80	60-75	45-65	25-40	0-14	NP
	16-31	Very gravelly coarse sandy loam, very gravelly sandy loam	GM, SM	A-1	0	0	45-65	35-50	25-45	10-25	0-14	NP
	31-60	Very gravelly coarse sandy loam	GM	A-1	0	0	35-60	25-50	15-30	10-20	0-14	NP
2451: Sanwell-----	0-9	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	60-75	45-60	25-40	0-14	NP
	9-16	Gravelly sandy loam, gravelly fine sandy loam	SM	A-2, A-4	0	0-15	70-80	60-75	45-65	25-40	0-14	NP
	16-31	Very gravelly coarse sandy loam, very gravelly sandy loam	GM, SM	A-1	0	0	45-65	35-50	25-45	10-25	0-14	NP
	31-60	Very gravelly coarse sandy loam	GM	A-1	0	0	35-60	25-50	15-30	10-20	0-14	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Sanwell-----	0-9	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	60-75	45-60	25-40	0-14	NP
	9-16	Gravelly sandy loam, gravelly fine sandy loam	SM	A-2, A-4	0	0-15	70-80	60-75	45-65	25-40	0-14	NP
	16-31	Very gravelly coarse sandy loam, very gravelly sandy loam	GM, SM	A-1	0	0	45-65	35-50	25-45	10-25	0-14	NP
	31-60	Very gravelly coarse sandy loam	GM	A-1	0	0	35-60	25-50	15-30	10-20	0-14	NP
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
2461: Nowoy-----	0-3	Gravelly loamy fine sand	SM	A-2	0	0	65-85	55-75	50-65	10-20	0-14	NP
	3-20	Very gravelly sandy loam	GM	A-1	0	0	40-55	35-50	25-45	15-25	0-14	NP
	20-60	Clay loam, silty clay loam	CL	A-6, A-7	0	0	100	100	90-95	60-85	35-50	15-25
Skelon-----	0-4	Gravelly sandy loam	SM	A-1, A-2	0	0-5	60-80	50-75	40-60	15-35	0-14	NP
	4-28	Stratified very gravelly fine sandy loam to very gravelly coarse sandy loam	GM, GP-GM	A-1	0-5	0-10	35-55	30-50	15-35	10-20	0-14	NP
	28-44	Indurated			---	---	---	---	---	---	---	---
	44-52	Very gravelly sandy loam	GM	A-1	0-5	0-15	35-55	30-50	15-40	10-25	0-14	NP
	52-60	Extremely gravelly coarse sand	GP	A-1	0-5	10-25	20-35	15-30	5-15	0-5	0-14	NP
2471: Lewdlac-----	0-3	Gravelly loamy fine sand	SM	A-1, A-2	0	0	60-80	50-75	40-60	15-25	---	NP
	3-16	Fine sandy loam, sandy loam	SM	A-4	0	0	85-95	75-90	55-70	35-50	---	NP
	16-21	Cemented			---	---	---	---	---	---	---	---
	21-60	Stratified gravelly loam to extremely gravelly clay	GC	A-2, A-6	0	0-10	25-60	20-55	15-45	10-40	25-40	10-20
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid	Plas-
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200	limit	ticity index
	In				Pct	Pct					Pct	
2492: Downeyville-----	0-4	Very gravelly fine sandy loam	SM, SC-SM	A-1, A-2	0	5-20	60-70	30-55	25-45	15-30	15-25	NP-10
	4-9	Very gravelly loam, very gravelly fine sandy loam	GC	A-2, A-6	0-5	10-25	40-60	30-50	25-50	20-40	25-35	10-15
	9-13	Unweathered bedrock			---	---	---	---	---	---	---	---
Silverbow-----	0-2	Gravelly sandy loam	GM, SM	A-2	0	5-15	60-75	50-70	30-55	25-35	20-25	NP-5
	2-10	Very stony clay loam, extremely cobbly sandy clay loam, very cobbly clay loam	GC	A-2, A-6	5-30	25-35	35-55	30-50	25-50	15-40	25-40	10-20
	10-18	Indurated			---	---	---	---	---	---	---	---
	18-40	Cemented			---	---	---	---	---	---	---	---
Rock Outcrop----	---	---	---	---	---	---	---	---	---	---	---	---
2493: Downeyville-----	0-4	Very gravelly fine sandy loam	SC-SM, SM	A-1, A-2	0	5-20	60-70	30-55	25-45	15-30	15-25	NP-10
	4-9	Very gravelly loam, very gravelly fine sandy loam	GC	A-2, A-6	0-5	10-25	40-60	30-50	25-50	20-40	25-35	10-15
	9-13	Unweathered bedrock			---	---	---	---	---	---	---	---
Tognoni-----	0-4	Very cobbly fine sandy loam	GM	A-1, A-2	0-5	30-40	45-55	40-50	35-45	20-30	20-25	NP-5
	4-14	Very cobbly clay loam, extremely cobbly clay	GC	A-2, A-7	0-5	30-55	30-60	25-55	20-50	20-45	40-50	20-30
	14-24	Unweathered bedrock			---	---	---	---	---	---	---	---
Stonell-----	0-3	Gravelly sandy loam	SM	A-1, A-2, A-4	0	0-5	60-75	55-70	30-60	20-40	20-25	NP-5
	3-8	Very gravelly clay loam, very gravelly sandy clay loam, gravelly loam	GC	A-2	0	0-5	35-55	25-50	20-40	15-35	25-35	10-15
	8-60	Stratified very gravelly sandy loam to very gravelly loamy coarse sand	GM, GW-GM	A-1	0	0-5	35-55	25-50	10-25	5-20	---	NP
2494: Downeyville-----	0-4	Very gravelly fine sandy loam	SC-SM, SM	A-1, A-2	0	5-20	60-70	30-55	25-45	15-30	15-25	NP-10
	4-9	Very gravelly loam, very gravelly fine sandy loam	GC	A-2, A-6	0-5	10-25	40-60	30-50	25-50	20-40	25-35	10-15
	9-13	Unweathered bedrock			---	---	---	---	---	---	---	---

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
Vindicator-----	0-2	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	35-55	30-50	20-35	10-20	20-25	NP-5
	2-7	Very gravelly clay loam, very gravelly loam	GC	A-2	0	0-10	45-60	35-50	30-40	20-35	25-40	10-20
	7-11	Weathered bedrock			---	---	---	---	---	---	---	---
Stewval-----	0-1	Very gravelly fine sandy loam	GC-GM, GC	A-2	0	0-10	35-55	30-45	20-35	10-20	20-25	5-10
	1-7	Extremely gravelly loam, very gravelly clay loam, very gravelly loam	GC	A-2	0-10	0-25	20-55	15-45	10-35	10-30	30-40	10-20
	7-11	Unweathered bedrock			---	---	---	---	---	---	---	---
2495: Downeyville-----	0-4	Very gravelly fine sandy loam	SC-SM, SM	A-1, A-2	0	5-20	60-70	30-55	25-45	15-30	15-25	NP-10
	4-9	Very gravelly loam, very gravelly fine sandy loam	GC	A-2, A-6	0-5	10-25	40-60	30-50	25-50	20-40	25-35	10-15
	9-13	Unweathered bedrock			---	---	---	---	---	---	---	---
Gabbvally-----	0-4	Very gravelly sandy loam	GM	A-1	0	0-10	50-60	35-45	25-40	15-25	20-25	NP-5
	4-12	Very gravelly sandy clay loam, very gravelly sandy loam, very gravelly loam	GC, GC-GM	A-2	0-5	0-15	50-60	35-50	25-35	15-25	25-35	5-15
	12-16	Unweathered bedrock			---	---	---	---	---	---	---	---
2496: Downeyville-----	0-4	Very gravelly fine sandy loam	SC-SM, SM	A-1, A-2	0	5-20	60-70	30-55	25-45	15-30	15-25	NP-10
	4-9	Very gravelly loam, very gravelly fine sandy loam	GC	A-2, A-6	0-5	10-25	40-60	30-50	25-50	20-40	25-35	10-15
	9-13	Unweathered bedrock			---	---	---	---	---	---	---	---
Pintwater-----	0-4	Very gravelly fine sandy loam	GM	A-1	0-5	0-10	35-60	30-50	20-40	10-25	20-25	NP-5
	4-11	Very stony fine sandy loam, very cobbly sandy loam, extremely gravelly sandy loam	GM	A-1	5-15	30-45	35-60	30-50	15-35	10-20	20-25	NP-5
	11-15	Unweathered bedrock			---	---	---	---	---	---	---	---

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2510: Fuegosta-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0-5	65-80	60-75	50-70	25-40	15-25	NP-5
	4-14	Gravelly clay, gravelly sandy clay, gravelly clay loam	CH, CL, GC, SC	A-2, A-7	0	0-5	60-75	55-70	40-60	30-55	45-55	20-30
	14-18	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-45	10-25	15-25	NP-5
	18-26	Indurated			---	---	---	---	---	---	---	---
	26-60	Cemented			---	---	---	---	---	---	---	---
Tomel-----	0-3	Very gravelly sandy loam	GM	A-1	0	0	35-60	25-50	20-35	10-25	20-25	NP-5
	3-19	Very gravelly clay loam, very gravelly sandy clay loam	GC	A-2	0	0	40-60	35-50	30-40	20-35	30-35	10-15
	19-26	Indurated			---	---	---	---	---	---	---	---
	26-60	Very gravelly sand, extremely gravelly sand	GW	A-1	0	0-5	20-40	15-35	10-20	0-5	---	NP
Izo-----	0-9	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	9-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP
2511: Fuegosta-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0-5	65-80	60-75	50-70	25-40	15-25	NP-5
	4-14	Gravelly clay, gravelly sandy clay, gravelly clay loam	CH, CL, GC, SC	A-2, A-7	0	0-5	60-75	55-70	40-60	30-55	45-55	20-30
	14-18	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-45	10-25	15-25	NP-5
	18-26	Indurated			---	---	---	---	---	---	---	---
	26-60	Cemented			---	---	---	---	---	---	---	---
Wardenot-----	0-5	Gravelly sandy loam	SM	A-1, A-2, A-4	0	0	60-80	50-75	40-60	20-40	20-25	NP-5
	5-60	Stratified very gravelly fine sandy loam to extremely cobbly loamy sand	GM, GP-GM	A-1	0-5	10-40	25-50	20-45	15-40	5-15	---	NP
Izo-----	0-8	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	8-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP
2520: Vigus-----	0-7	Gravelly sandy loam	SM	A-2	0	0-5	65-80	60-75	50-70	10-25	---	NP
	7-13	Sandy clay loam, fine sandy loam, loam	SC, SC-SM	A-2, A-4, A-6	0	0-5	85-100	75-90	65-80	25-50	25-35	5-15
	13-60	Stratified gravelly loamy sand to sandy loam	SM	A-1, A-2	0	0-10	70-85	60-80	35-55	15-30	15-25	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Fuegosta-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0-5	65-80	60-75	50-70	25-40	15-25	NP-5
	4-14	Gravelly clay, gravelly sandy clay, gravelly clay loam	CH, CL, GC, SC	A-2, A-7	0	0-5	60-75	55-70	40-60	30-55	45-55	20-30
	14-18	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-45	10-25	15-25	NP-5
	18-26	Indurated			---	---	---	---	---	---	---	---
	26-60	Cemented			---	---	---	---	---	---	---	---
Izo-----	0-8	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	8-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP
2521: Vigus-----	0-7	Gravelly sandy loam	SM	A-2	0	0-5	65-80	60-75	50-70	10-25	---	NP
	7-13	Sandy clay loam, fine sandy loam, loam	SC, SC-SM	A-2, A-4, A-6	0	0-5	85-100	75-90	65-80	25-50	25-35	5-15
	13-60	Stratified gravelly loamy sand to sandy loam	SM	A-1, A-2	0	0-10	70-85	60-80	35-55	15-30	15-25	NP-5
Wardenot-----	0-5	Gravelly sandy loam	SM	A-1, A-2, A-4	0	0	60-80	50-75	40-60	20-40	20-25	NP-5
	5-60	Stratified very gravelly fine sandy loam to extremely cobbly loamy sand	GM, GP-GM	A-1	0-5	10-40	25-50	20-45	15-40	5-15	---	NP
Fuegosta-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0-5	65-80	60-75	50-70	25-40	15-25	NP-5
	4-14	Gravelly clay, gravelly sandy clay, gravelly clay loam	CH, CL, GC, SC	A-2, A-7	0	0-5	60-75	55-70	40-60	30-55	45-55	20-30
	14-18	Very gravelly sandy loam	GM	A-1	0	0-5	30-55	25-50	20-45	10-25	15-25	NP-5
	18-26	Indurated			---	---	---	---	---	---	---	---
	26-60	Cemented			---	---	---	---	---	---	---	---
2531: Laxal-----	0-4	Gravelly sandy loam	GM, SM	A-1, A-2	0-5	0-10	60-80	50-75	40-60	20-35	15-25	NP-5
	4-60	Stratified very gravelly sandy loam to very gravelly loamy coarse sand	GM	A-1	0-5	0-15	35-45	30-40	15-25	10-15	---	NP
Stonell-----	0-3	Gravelly sandy loam	SM	A-1, A-2, A-4	0	0-5	60-75	55-70	30-60	20-40	20-25	NP-5
	3-8	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2	0	0-5	35-55	25-50	20-40	15-35	25-35	10-15
	8-60	Stratified very gravelly sandy loam to very gravelly loamy coarse sand	GM, GW-GM	A-1	0	0-5	35-55	25-50	10-25	5-20	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct					Pct	
Unsel-----	In											
	0-7	Gravelly sandy loam	SC-SM, SC	A-2	0	0	75-85	55-75	40-60	25-35	25-30	5-10
	7-11	Gravelly clay loam, gravelly sandy clay loam	SC	A-6	0	0	75-85	55-75	45-60	35-45	35-40	15-20
	11-20	Gravelly sandy loam, gravelly sandy clay loam	SC-SM, SC	A-2	0	0	60-75	50-70	35-50	20-35	20-30	5-10
2532: Laxal-----	20-60	Very gravelly sand, very gravelly loamy sand, extremely gravelly sand	GP, GP-GM	A-1	0	0	40-50	20-35	10-25	0-10	---	NP
	0-4	Gravelly sandy loam	GM, SM	A-1, A-2	0-5	0-10	60-80	50-75	40-60	20-35	15-25	NP-5
	4-60	Stratified very gravelly sandy loam to very gravelly loamy coarse sand	GM	A-1	0-5	0-15	35-45	30-40	15-25	10-15	---	NP
Fang-----	0-3	Sandy loam	SM	A-2, A-4	0	0	90-100	85-100	60-80	30-45	15-25	NP-5
	3-42	Fine sandy loam, sandy loam	SM	A-2, A-4	0	0	80-100	75-100	40-75	25-45	20-25	NP-5
	42-64	Stratified loam to very gravelly sand	SM	A-2	0	0	65-90	60-85	45-70	25-35	---	NP
2540: Lidan-----	0-5	Gravelly sandy loam	SM	A-1, A-2	0	0-5	65-85	55-75	30-65	20-35	15-25	NP-5
	5-14	Very gravelly clay, very gravelly sandy clay	GC	A-2, A-7	0	15-30	45-55	35-45	20-45	20-40	50-70	25-45
	14-30	Extremely gravelly sandy clay loam, extremely gravelly clay loam, extremely gravelly sandy clay	GC	A-2	0	10-20	30-40	20-30	15-25	10-20	35-50	20-30
	30-36	Indurated			---	---	---	---	---	---	---	---
	36-60	Cemented			---	---	---	---	---	---	---	---
Izo-----	0-8	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	8-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
2550: Stonewall-----	In				Pct	Pct					Pct	
	0-4	Gravelly fine sandy loam	GM, SM	A-2, A-4	0	0	60-85	55-75	45-70	30-45	15-25	NP-5
	4-16	Very gravelly clay, very gravelly sandy clay, very gravelly clay loam	GC	A-2, A-7	0	0-5	40-60	35-50	20-50	20-40	40-65	25-40
	16-60	Extremely gravelly coarse sandy loam, very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	25-40	15-30	5-25	5-20	0-14	NP
Izo-----	0-3	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	3-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP
Lidan-----	0-5	Gravelly sandy loam	SM	A-1, A-2	0	0-5	65-85	55-75	30-65	20-35	15-25	NP-5
	5-14	Very gravelly clay, very gravelly sandy clay	GC	A-2, A-7	0	15-30	45-55	35-45	20-45	20-40	50-70	25-45
	14-30	Extremely gravelly sandy clay loam, extremely gravelly clay loam, extremely gravelly sandy clay	GC	A-2	0	10-20	30-40	20-30	15-25	10-20	35-50	20-30
	30-36	Indurated			---	---	---	---	---	---	---	---
	36-60	Cemented			---	---	---	---	---	---	---	---
2570: Stargo-----	0-4	Fine sandy loam	ML, SM	A-4	0	0-5	90-100	85-95	70-90	35-55	---	NP
	4-10	Clay loam, sandy clay loam	CL	A-6, A-7	0	0	95-100	85-95	75-85	65-75	35-45	15-20
	10-60	Stratified sandy loam to very gravelly sand	SM	A-1, A-2	0	0-5	80-90	75-85	45-60	20-35	---	NP
Playas-----	0-6	Silty clay loam	ML	A-6, A-7	0	0	100	100	100	90-100	35-50	10-20
	6-60	Silty clay loam, clay, silty clay	CH, CL, MH	A-7	0	0	100	100	100	90-100	45-75	20-40

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2580: Wardenot-----	0-5	Very gravelly loamy sand	GM, SM	A-1	0	0-10	45-60	35-55	20-40	10-15	---	NP
	5-60	Stratified very gravelly fine sandy loam to extremely cobble loamy sand	GM, GP-GM	A-1	0-5	5-40	25-50	20-45	15-40	5-15	---	NP
Izo-----	0-8	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	8-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP
2601: Cobatus-----	0-2	Loam	CL, CL-ML	A-4, A-6	0	0	100	90-100	75-85	50-65	25-35	5-15
	2-14	Loam, silt loam	CL, CL-ML	A-4, A-6	0	0	95-100	85-100	75-85	50-65	25-35	5-15
	14-60	Loam, clay loam, silt loam	CL	A-6	0	0	100	100	75-85	60-75	30-40	10-20
Kawich-----	0-2	Fine sand	SM	A-2	0	0	100	100	75-90	15-30	---	NP
	2-60	Fine sand	SM	A-2	0	0	100	100	75-90	15-30	---	NP
2611: Corbilt-----	0-4	Very gravelly sandy loam	GM	A-1	0	0-10	30-55	25-50	15-35	10-25	---	NP
	4-32	Gravelly fine sandy loam, gravelly sandy loam	SM	A-1, A-2, A-4	0	0	65-80	55-75	45-65	20-45	---	NP
	32-56	Very gravelly sandy loam	SM	A-1, A-2	0	10-25	60-70	50-60	35-55	20-30	---	NP
	56-60	Cemented			---	---	---	---	---	---	---	---
2630: Wechech-----	0-2	Gravelly loam	GC-GM, SC-SM, A-4 GC		0	0-10	60-80	55-75	40-60	35-50	20-30	5-10
	2-7	Extremely gravelly sandy loam, very gravelly loam, very gravelly sandy loam	GC-GM, GW-GC, A-2 GC		0	0-25	35-50	25-45	15-40	5-35	20-30	5-10
	7-60	Indurated			---	---	---	---	---	---	---	---
Commski-----	0-5	Very gravelly fine sandy loam	GM	A-2, A-1	0-5	0-10	35-55	25-50	20-40	10-30	25-30	NP-5
	5-14	Extremely gravelly sandy loam	GW-GM	A-1	0-5	0-10	25-35	15-25	10-20	5-10	25-30	NP-5
	14-60	Extremely gravelly coarse sandy loam, extremely gravelly sandy loam, extremely gravelly fine sandy loam	GW-GM	A-1	0-5	5-20	25-35	15-25	10-20	5-10	25-30	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
	In				Pct	Pct					Pct	
2640: Downeyville-----	0-4	Very gravelly fine sandy loam	SC-SM, SM	A-1, A-2	0	5-20	60-70	30-55	25-45	15-30	15-25	NP-10
	4-9	Very gravelly loam, very gravelly fine sandy loam	GC	A-2, A-6	0-5	10-25	40-60	30-50	25-50	20-40	25-35	10-15
	9-13	Unweathered bedrock			---	---	---	---	---	---	---	---
Advokay-----	0-3	Gravelly sandy loam	GM, SM	A-1, A-2	0	0	55-80	50-75	30-55	15-30	20-25	NP-5
	3-7	Gravelly sandy clay loam	GC, SC	A-2	0	0	55-80	50-75	30-55	20-35	30-40	10-15
	7-11	Weathered bedrock			---	---	---	---	---	---	---	---
Pintwater-----	0-4	Very gravelly fine sandy loam	GM	A-1	0-5	0-10	35-60	30-50	20-40	10-25	20-25	NP-5
	4-11	Very stony fine sandy loam, very cobbly sandy loam, extremely gravelly sandy loam	GM	A-1	5-15	30-45	35-60	30-50	15-35	10-20	20-25	NP-5
	11-15	Unweathered bedrock			---	---	---	---	---	---	---	---
2641: Advokay-----	0-3	Gravelly sandy loam	GM, SM	A-1, A-2	0	0	55-80	50-75	30-55	15-30	20-25	NP-5
	3-7	Gravelly sandy clay loam	GC, SC	A-2	0	0	55-80	50-75	30-55	20-35	30-40	10-15
	7-11	Weathered bedrock			---	---	---	---	---	---	---	---
Ardivey-----	0-4	Very gravelly sandy loam	GC-GM	A-2	0	0-15	30-55	25-50	15-30	10-20	20-25	5-10
	4-14	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2	0-5	10-25	40-55	30-45	20-40	15-30	25-40	10-20
	14-60	Extremely gravelly loamy sand	GW, GW-GM	A-1	0-10	10-45	15-35	10-30	5-20	0-10	---	NP
Leo-----	0-4	Gravelly sandy loam	SM	A-1, A-2	0	0	65-85	50-75	40-60	20-35	15-25	NP-5
	4-60	Stratified gravelly fine sandy loam to extremely gravelly coarse sand	GM, GW-GM, SM, SW-SM	A-1	0-5	0-25	45-60	40-50	15-35	5-20	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2642:												
Advokay-----	0-3	Gravelly sandy loam	GM, SM	A-1, A-2	0	0	55-80	50-75	30-55	15-30	20-25	NP-5
	3-7	Gravelly sandy clay loam	GC, SC	A-2	0	0	55-80	50-75	30-55	20-35	30-40	10-15
	7-11	Weathered bedrock			---	---	---	---	---	---	---	---
Blacktop-----	0-7	Very stony fine sandy loam	GM	A-1	15-25	15-25	35-65	30-60	20-40	10-25	20-30	NP-5
	7-17	Unweathered bedrock			---	---	---	---	---	---	---	---
2650:												
Luning-----	0-3	Loamy sand	SM	A-2	0	0	100	90-100	70-85	20-35	---	NP
	3-60	Stratified sandy loam to very gravelly coarse sand	SM	A-1, A-2	0-10	0	75-95	55-90	45-80	10-30	---	NP
Wardenot-----	0-5	Gravelly sandy loam	SM	A-1, A-2, A-4	0	0	60-80	50-75	40-60	20-40	20-25	NP-5
	5-60	Stratified very gravelly fine sandy loam to extremely cobbly loamy sand	GM, GP-GM	A-1	0-5	10-40	25-50	20-45	15-40	5-15	---	NP
Izo-----	0-8	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	8-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP
2660:												
Stonell-----	0-3	Gravelly sandy loam	SM	A-1, A-2, A-4	0	0-5	60-75	55-70	30-60	20-40	20-25	NP-5
	3-8	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2	0	0-5	35-55	25-50	20-40	15-35	25-35	10-15
	8-60	Stratified very gravelly sandy loam to very gravelly loamy coarse sand	GM, GW-GM	A-1	0	0-5	35-55	25-50	10-25	5-20	---	NP
Wardenot-----	0-5	Very gravelly sandy loam	GM	A-1	0	0-10	45-60	35-55	20-35	10-20	15-20	NP-5
	5-60	Stratified very gravelly fine sandy loam to extremely cobbly loamy sand	GM, GP-GM	A-1	0-5	5-40	25-50	20-45	15-40	5-15	---	NP
Izo-----	0-8	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	8-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2670: Ardivey-----	0-4	Very gravelly sandy loam	GC-GM	A-2	0	0-15	30-55	25-50	15-30	10-20	20-25	5-10
	4-14	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2	0-5	10-25	40-55	30-45	20-40	15-30	25-40	10-20
	14-60	Extremely gravelly loamy sand	GW, GW-GM	A-1	0-10	10-45	15-35	10-30	5-20	0-10	---	NP
Izo-----	0-8	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	8-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP
2671: Ardivey-----	0-4	Very gravelly sandy loam	GC-GM	A-2	0	0-15	30-55	25-50	15-30	10-20	20-25	5-10
	4-14	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2	0-5	10-25	40-55	30-45	20-40	15-30	25-40	10-20
	14-60	Extremely gravelly loamy sand	GW, GW-GM	A-1	0-10	10-45	15-35	10-30	5-20	0-10	---	NP
Stonell-----	0-3	Gravelly sandy loam	SM	A-1, A-2, A-4	0	0-5	60-75	55-70	30-60	20-40	20-25	NP-5
	3-8	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2	0	0-5	35-55	25-50	20-40	15-35	25-35	10-15
	8-60	Stratified very gravelly sandy loam to very gravelly loamy coarse sand	GM, GW-GM	A-1	0	0-5	35-55	25-50	10-25	5-20	---	NP
Izo-----	0-8	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	8-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10	3-10	4	10	40	200		
					inches	inches						
	In				Pct	Pct					Pct	
Gabbvally-----	0-4	Very gravelly sandy loam	GM	A-1	0	0-10	50-60	35-45	25-40	15-25	20-25	NP-5
	4-12	Very gravelly sandy clay loam, very gravelly sandy loam, very gravelly loam	GC, GC-GM	A-2	0-5	0-15	50-60	35-50	25-35	15-25	25-35	5-15
	12-15	Unweathered bedrock			---	---	---	---	---	---	---	---
Stewval-----	0-1	Very gravelly fine sandy loam	GC-GM, GC	A-2	0	0-10	35-55	30-45	20-35	10-20	20-25	5-10
	1-7	Extremely gravelly loam, very gravelly clay loam, very gravelly loam	GC	A-2	0-10	0-25	20-55	15-45	10-35	10-30	30-40	10-20
	7-11	Unweathered bedrock			---	---	---	---	---	---	---	---
2690: Leo-----	0-4	Gravelly sandy loam	SM	A-1, A-2	0	0	65-85	50-75	40-60	20-35	15-25	NP-5
	4-60	Stratified gravelly fine sandy loam to extremely gravelly coarse sand	GM, GW-GM, SM, SW-SM	A-1	0-5	0-25	45-60	40-50	15-35	5-20	---	NP
Izo-----	0-8	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	8-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP
2701: Cobatus-----	0-2	Loam	CL, CL-ML	A-4, A-6	0	0	100	90-100	75-85	50-65	25-35	5-15
	2-14	Loam, silt loam	CL, CL-ML	A-4, A-6	0	0	95-100	85-100	75-85	50-65	25-35	5-15
	14-60	Loam, clay loam, silt loam	CL	A-6	0	0	100	100	75-85	60-75	30-40	10-20
2710: Papoose-----	0-6	Gravelly loamy sand	SM	A-1	0	0	65-80	60-75	25-45	10-25	---	NP
	6-12	Gravelly sandy clay loam	SC	A-6	0	0	75-80	70-75	45-60	35-50	30-40	10-20
	12-25	Very gravelly loam	GC	A-2	0	0	45-55	40-50	30-45	20-30	25-30	10-15
	25-60	Stratified extremely gravelly sandy loam to extremely gravelly loamy coarse sand	GP-GM	A-1	0	0-10	20-30	15-25	10-20	5-10	---	NP
Vindicator-----	0-2	Very gravelly sandy loam	GM, GW-GM	A-1	0	0-10	35-55	30-50	20-35	10-20	20-25	NP-5
	2-7	Very gravelly clay loam, very gravelly loam	GC	A-2	0	0-10	45-60	35-50	30-40	20-35	25-40	10-20
	7-17	Weathered bedrock			---	---	---	---	---	---	---	---

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
	In				Pct	Pct					Pct	
Espint-----	0-1	Very gravelly fine sandy loam	GM, SM	A-1	0	0-15	35-65	30-50	25-40	10-15	20-25	NP-5
	1-7	Gravelly clay, sandy clay, gravelly clay loam	CH, CL, GC, SC	A-7	0	0-10	65-90	55-85	45-75	35-60	40-55	20-30
	7-17	Weathered bedrock			---	---	---	---	---	---	---	---
2720: Unsel-----	0-7	Gravelly sandy loam	SC-SM, SC	A-2	0	0	75-85	55-75	40-60	25-35	25-30	5-10
	7-11	Gravelly clay loam, gravelly sandy clay loam	SC	A-6	0	0	75-85	55-75	45-60	35-45	35-40	15-20
	11-20	Gravelly sandy loam, gravelly sandy clay loam	SC-SM, SC	A-2	0	0	60-75	50-70	35-50	20-35	20-30	5-10
	20-60	Very gravelly sand, very gravelly loamy sand, extremely gravelly sand	GP, GP-GM	A-1	0	0	40-50	20-35	10-25	0-10	---	NP
Stonell-----	0-3	Gravelly sandy loam	SM	A-1, A-2, A-4	0	0-5	60-75	55-70	30-60	20-40	20-25	NP-5
	3-8	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2	0	0-5	35-55	25-50	20-40	15-35	25-35	10-15
	8-60	Stratified very gravelly sandy loam to very gravelly loamy coarse sand	GM, GW-GM	A-1	0	0-5	35-55	25-50	10-25	5-20	---	NP
Veet-----	0-5	Very gravelly sandy loam	SM	A-1	0	0-10	60-75	30-50	20-45	15-25	15-25	NP-5
	5-20	Very gravelly sandy loam	GC-GM, GC	A-2	0	10-25	40-60	35-55	25-50	15-25	20-25	5-10
	20-60	Stratified extremely gravelly sandy loam to very gravelly loamy coarse sand	GM, GP-GM	A-1	0	10-25	45-55	30-50	15-30	5-15	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2750: Silverbow-----	0-2	Gravelly sandy loam	GM, SM	A-2	0	5-15	60-75	50-70	30-55	25-35	20-25	NP-5
	2-10	Very stony clay loam, extremely cobbly sandy clay loam, very cobbly clay loam	GC	A-2, A-6	5-30	25-35	35-55	30-50	25-50	15-40	25-40	10-20
	10-18	Indurated			---	---	---	---	---	---	---	---
	18-40	Cemented			---	---	---	---	---	---	---	---
Wardenot-----	0-5	Very gravelly loamy sand	GM, SM	A-1	0	0-10	45-60	35-55	20-40	10-15	---	NP
	5-60	Stratified very gravelly fine sandy loam to extremely cobbly loamy sand	GM, GP-GM	A-1	0-5	5-40	25-50	20-45	15-40	5-15	---	NP
Izo-----	0-8	Very gravelly sand	GP, GP-GM, SM, SP-SM	A-1	0-5	0-15	35-60	30-50	15-35	0-10	---	NP
	8-60	Stratified gravelly loamy sand to extremely gravelly coarse sand	GW, GW-GM	A-1	0-5	0-15	20-40	15-35	10-20	0-10	---	NP
2760: Downeyville-----	0-4	Very gravelly fine sandy loam	SC-SM, SM	A-1, A-2	0	5-20	60-70	30-55	25-45	15-30	15-25	NP-10
	4-9	Very gravelly loam, very gravelly fine sandy loam	GC	A-2, A-6	0-5	10-25	40-60	30-50	25-50	20-40	25-35	10-15
	9-13	Unweathered bedrock			---	---	---	---	---	---	---	---
Unsel-----	0-7	Gravelly sandy loam	SC-SM, SC	A-2	0	0	75-85	55-75	40-60	25-35	25-30	5-10
	7-11	Gravelly clay loam, gravelly sandy clay loam	SC	A-6	0	0	75-85	55-75	45-60	35-45	35-40	15-20
	11-20	Gravelly sandy loam, gravelly sandy clay loam	SC-SM, SC	A-2	0	0	60-75	50-70	35-50	20-35	20-30	5-10
	20-60	Very gravelly sand, very gravelly loamy sand, extremely gravelly sand	GP, GP-GM	A-1	0	0	40-50	20-35	10-25	0-10	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Tokoper-----	0-3	Very cobbly sandy loam	GM, SM	A-1, A-2	0-5	30-45	55-75	45-70	30-45	20-30	15-25	NP-5
	3-9	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2, A-6	0-5	10-25	50-60	40-55	30-45	20-40	30-40	10-15
	9-14	Very gravelly loam, extremely gravelly loam, very gravelly sandy loam	GC-GM, GM, GW-GC, GW-GM	A-2	0-5	25-40	30-50	20-40	10-30	5-25	25-35	5-10
	14-15	Indurated			---	---	---	---	---	---	---	---
	15-25	Unweathered bedrock			---	---	---	---	---	---	---	---
2770: Bullfor-----	0-1	Fine sand	SM	A-2	0	0	80-100	75-100	65-85	20-30	---	NP
	1-24	Loamy sand, fine sand	SM	A-2	0	0	90-100	85-100	55-80	20-30	---	NP
	24-25	Indurated			---	---	---	---	---	---	---	---
	25-60	Very gravelly sandy loam	GM	A-1	0	0	35-45	25-35	20-30	10-15	---	NP
Panor-----	0-1	Sandy loam	CL-ML, ML, SC-SM, SM	A-4	0	0	100	90-100	70-80	45-60	20-30	NP-10
	1-5	Silt loam	ML	A-4	0	0	100	100	90-100	75-85	20-35	NP-10
	5-23	Clay loam	CL	A-6, A-7	0	0	100	100	90-100	65-75	35-45	15-25
	23-60	Gravelly clay loam	CL, GC, SC	A-6, A-7	0	0	65-80	55-75	50-65	40-55	35-45	15-25
Bluepoint-----	0-9	Loamy fine sand	SM	A-2, A-4	0	0	100	100	75-85	25-45	---	NP
	9-17	Stratified fine sand to gravelly loamy fine sand	SM	A-2	0	0	70-100	60-90	55-85	10-30	---	NP
	17-41	Loamy fine sand, loamy sand, fine sand	SM	A-2, A-4	0	0	100	100	65-85	25-45	---	NP
	41-60	Stratified sand to very fine sandy loam	ML, SM	A-2, A-4	0	0	100	100	50-90	30-60	---	NP
2781: Haymont-----	0-6	Very fine sandy loam	SM	A-4	0	0	100	100	85-100	35-50	15-25	NP-5
	6-40	Stratified very fine sandy loam to silt loam	ML	A-4	0	0	100	100	85-100	50-70	15-25	NP-5
	40-60	Stratified fine sandy loam to silt loam	CL-ML, ML	A-4	0	0	100	100	80-90	50-75	15-30	NP-10
Bluepoint-----	0-9	Loamy fine sand	SM	A-2, A-4	0	0	100	100	75-85	25-45	---	NP
	9-17	Stratified fine sand to gravelly loamy fine sand	SM	A-2	0	0	70-100	60-90	55-85	10-30	---	NP
	17-41	Loamy fine sand, loamy sand, fine sand	SM	A-2, A-4	0	0	100	100	65-85	25-45	---	NP
	41-60	Stratified sand to very fine sandy loam	ML, SM	A-2, A-4	0	0	100	100	50-90	30-60	---	NP
Panor-----	0-1	Sandy loam	SM, CL-ML, ML, SC-SM	A-4	0	0	100	90-100	70-80	45-60	20-30	NP-10
	1-5	Silt loam	ML	A-4	0	0	100	100	90-100	75-85	20-35	NP-10
	5-23	Clay loam	CL	A-6, A-7	0	0	100	100	90-100	65-75	35-45	15-25
	23-60	Gravelly clay loam	CL, GC, SC	A-6, A-7	0	0	65-80	55-75	50-65	40-55	35-45	15-25

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2810:												
Ashmed, moist---	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	70-85	60-75	50-65	30-40	15-25	NP-5
	4-7	Gravelly silt loam	ML	A-4	0	0	70-80	60-75	55-70	50-60	25-30	NP-5
	7-24	Extremely gravelly sandy clay loam, extremely gravelly clay loam	GC, GP-GC	A-2	0	0-25	25-35	10-25	5-20	5-15	35-45	20-30
	24-32	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GP-GM	A-1	0-5	0-15	25-35	10-25	5-15	5-10	15-25	NP-5
	32-60	Very gravelly coarse sandy loam, extremely gravelly sandy loam	GM, GP-GM	A-1	0	0-10	20-40	15-35	10-25	5-15	15-25	NP-5
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Niavi-----	0-2	Extremely cobble fine sandy loam	GP-GC, GC-GM	A-1, A-2	0-5	30-60	15-45	10-35	10-30	5-15	20-25	5-10
	2-8	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam, very gravelly sandy loam, very gravelly fine sandy loam	GC-GM, GP-GC	A-1, A-2	0-5	10-30	15-55	10-45	5-35	5-20	20-25	5-10
	8-29	Stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam	GP, GP-GM	A-1	0-5	10-30	15-45	5-30	5-20	0-5	15-15	NP-5
	29-60	Stratified extremely gravelly coarse sand to extremely gravelly coarse sandy loam	GP, GP-GM	A-1	0-5	10-30	15-45	5-30	5-20	0-5	15-15	NP-5
2820:												
Strozi-----	0-5	Gravelly fine sandy loam	GM, SM	A-1, A-2	0	0	60-85	50-75	40-65	20-35	15-25	NP-5
	5-13	Clay loam	CL	A-6	0	0	85-100	75-95	65-75	50-60	35-40	15-20
	13-32	Very gravelly sandy loam	GM, GW-GM	A-1	0	0	35-60	25-50	15-35	5-20	0-14	NP
	32-33	Cemented			---	---	---	---	---	---	---	---
	33-60	Very gravelly sandy loam	GM, GW-GM	A-1	0	0	35-55	25-50	15-35	5-20	0-14	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Corbilt-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	55-75	50-65	20-45	---	NP
	4-32	Gravelly fine sandy loam, gravelly sandy loam	SM	A-1, A-2, A-4	0	0	65-80	55-75	45-65	20-45	---	NP
	32-56	Very gravelly sandy loam	SM	A-1, A-2	0	10-25	60-70	50-60	35-55	20-30	---	NP
	56-60	Cemented			---	---	---	---	---	---	---	---
2840:												
Armpup-----	0-3	Fine sand	SM	A-2	0	0	80-100	75-100	65-80	20-35	---	NP
	3-18	Gravelly clay, gravelly clay loam	CH, CL, GC	A-7	0	0	60-80	55-75	45-65	35-55	45-55	20-30
	18-46	Very gravelly sandy clay, extremely gravelly sandy clay	GC	A-2	0	5-10	30-45	20-35	15-35	10-25	45-55	20-30
	46-55	Very gravelly loamy sand, very gravelly sandy loam	GM	A-1	0	5-10	30-60	25-50	20-40	10-25	---	NP
	55-59	Weathered bedrock			---	---	---	---	---	---	---	---
Strozi-----	0-5	Sandy loam	SM	A-2	0	0	80-100	75-95	50-70	25-35	15-25	NP-5
	5-13	Clay loam	CL	A-6	0	0	85-100	75-95	65-75	50-60	35-40	15-20
	13-32	Very gravelly sandy loam	GM, GW-GM	A-1	0	0	35-60	25-50	15-35	5-20	0-14	NP
	32-33	Cemented			---	---	---	---	---	---	---	---
	33-60	Very gravelly sandy loam	GM, GW-GM	A-1	0	0	35-55	25-50	15-35	5-20	0-14	NP
2850:												
Scottcas-----	0-2	Very gravelly sandy loam	GM	A-1	0	0-15	35-55	30-50	20-35	10-20	15-20	NP-5
	2-7	Very gravelly sandy clay loam, very gravelly clay loam, very gravelly loam	GC	A-2	0	0-15	35-55	30-50	25-45	15-35	30-40	10-15
	7-15	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GP-GM	A-1	0	0-5	15-30	10-25	10-20	5-10	15-20	NP-5
	15-21	Very gravelly loamy coarse sand	GM, GP-GM	A-1	0	0-5	30-50	25-45	10-25	5-15	---	NP
	21-60	Stratified extremely gravelly loamy coarse sand to extremely gravelly sandy loam	GP	A-1	0	0-20	15-30	10-25	5-15	0-5	---	NP
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2860: Sezna-----	0-3	Gravelly sandy loam	SM	A-1, A-2	0-1	0-10	65-85	50-75	40-60	20-35	15-25	NP-5
	3-18	Very cobbly clay loam, very cobbly sandy clay loam	GC	A-2, A-6	0-5	25-45	45-70	45-65	30-45	25-40	30-40	10-15
	18-60	Indurated			---	---	---	---	---	---	---	---
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
2870: Kanackey-----	0-3	Very gravelly loam	GC-GM, GC	A-2	0	10-25	45-55	35-45	20-40	20-35	20-25	5-10
	3-7	Very cobbly clay, very cobbly sandy clay	GC	A-2	0	30-50	50-60	45-55	40-50	20-35	45-65	20-35
	7-14	Extremely cobbly clay, extremely cobbly sandy clay, very cobbly clay	GC	A-2, A-7	0-5	50-65	40-70	35-65	30-55	15-40	45-65	20-35
	14-24	Unweathered bedrock			---	---	---	---	---	---	---	---
2880: Bacho-----	0-3	Very gravelly sandy loam	GM	A-1	0-5	0-15	30-55	25-50	15-35	10-25	15-25	NP-5
	3-11	Very gravelly sandy clay, very gravelly clay	GC, GM	A-2	0-5	0-10	30-55	25-50	20-45	10-35	40-55	15-25
	11-36	Indurated			---	---	---	---	---	---	---	---
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
Arizo-----	0-8	Very gravelly loamy sand	GM, GP-GM	A-1	0	0-5	30-55	25-50	15-30	5-15	---	NP
	8-60	Stratified cobbly coarse sand to extremely gravelly sand	GP, GP-GM	A-1	0	10-35	35-55	20-50	10-30	0-10	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
2890: Nopah-----	0-6	Loam	CL-ML, ML	A-4	0	0	100	100	80-90	70-85	20-30	NP-10
	6-60	Stratified loam to clay	CL, ML	A-6, A-7	0	0	100	100	95-100	85-95	30-50	10-20
Woda-----	0-1	Gravelly sandy loam	SM	A-2, A-4	0	0-5	65-85	55-75	40-60	30-40	0-14	NP
	1-10	Sandy loam	SM	A-4	0	0	85-100	80-90	65-70	35-45	0-14	NP
	10-18	Gravelly clay loam, gravelly loam	CL, GC, SC	A-6	0	0	65-85	55-75	45-65	35-60	30-40	10-20
	18-60	Indurated			---	---	---	---	---	---	---	---
Gullied Land----	0-60	Variable			0	0	---	---	---	---	0-14	---
2900: Playas-----	0-6	Silty clay	MH	A-7	0	0	100	100	100	90-100	50-80	20-40
	6-60	Silty clay loam, clay, silty clay	CH, CL, MH	A-7	0	0	100	100	100	90-100	45-75	20-40
2901: Playas-----	0-6	Silty clay loam	ML	A-6, A-7	0	0	100	100	100	90-100	35-50	10-20
	6-60	Silty clay loam, clay, silty clay	CH, CL, MH	A-7	0	0	100	100	100	90-100	45-75	20-40
Corbilt-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	65-80	55-75	50-65	20-45	---	NP
	4-32	Gravelly fine sandy loam, gravelly sandy loam	SM	A-1, A-2, A-4	0	0	65-80	55-75	45-65	20-45	---	NP
	32-56	Very gravelly sandy loam	SM	A-1, A-2	0	10-25	60-70	50-60	35-55	20-30	---	NP
	56-60	Cemented			---	---	---	---	---	---	---	---
Bluepoint-----	0-9	Loamy fine sand	SM	A-2, A-4	0	0	100	100	75-85	25-45	---	NP
	9-17	Stratified fine sand to gravelly loamy fine sand	SM	A-2	0	0	70-100	60-90	55-85	10-30	---	NP
	17-41	Loamy fine sand, loamy sand, fine sand	SM	A-2, A-4	0	0	100	100	65-85	25-45	---	NP
	41-60	Stratified sand to very fine sandy loam	ML, SM	A-2, A-4	0	0	100	100	50-90	30-60	---	NP
2903: Playas-----	0-6	Silty clay loam	ML	A-6, A-7	0	0	100	100	100	90-100	35-50	10-20
	6-60	Silty clay loam, clay, silty clay	CH, CL, MH	A-7	0	0	100	100	100	90-100	45-75	20-40
Mobl-----	0-2	Fine sandy loam	SM	A-2, A-4	0	0-5	90-100	85-100	60-75	25-40	15-25	NP-5
	2-7	Sandy clay loam, clay loam	SC	A-2, A-6, A-7	0	0	85-100	85-100	45-60	30-50	30-45	10-20
	7-17	Sandy loam	SM	A-2, A-4	0	0	90-100	85-100	55-75	25-40	15-25	NP-5
	17-60	Stratified sandy loam to extremely gravelly loamy sand	GM, SM	A-1	0	0-5	40-80	30-65	20-50	10-25	15-25	NP-5
Kawich-----	0-2	Fine sand	SM	A-2	0	0	100	100	75-90	15-30	---	NP
	2-60	Fine sand	SM	A-2	0	0	100	100	75-90	15-30	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth In	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit Pct	Plas- ticity index
			Unified	AASHTO	>10 inches Pct	3-10 inches Pct	4	10	40	200		
Cruzspring-----	0-1	Extremely gravelly sandy loam	GP-GM, GM, GP-GC	A-1	0-3	5-15	20-45	10-30	5-25	5-15	20-25	NP-5
	1-3	Very gravelly sandy loam, very gravelly fine sandy loam	GM, SM, GC-GM	A-1	0-3	5-15	40-70	30-50	20-40	15-25	20-25	NP-5
	3-10	Very gravelly loam, extremely gravelly sandy loam, very gravelly sandy loam, extremely gravelly loam	GC-GM, GP-GC	A-1, A-2	0-1	5-30	15-50	10-40	10-30	5-20	25-30	5-10
	10-13	Weathered bedrock			---	---	---	---	---	---	---	---
	13-17	Unweathered bedrock			---	---	---	---	---	---	---	---
2950: Pits-----	---	---	---	---	---	---	---	---	---	---	---	---
2951: Pits-----	---	---	---	---	---	---	---	---	---	---	---	---
2960: Tomel-----	0-3	Very gravelly sandy loam	GM	A-1	0	0	35-60	25-50	20-35	10-25	20-25	NP-5
	3-19	Very gravelly clay loam, very gravelly sandy clay loam	GC	A-2	0	0	40-60	35-50	30-40	20-35	30-35	10-15
	19-26	Indurated			---	---	---	---	---	---	---	---
	26-60	Very gravelly sand, extremely gravelly sand	GW	A-1	0	0-5	20-40	15-35	10-20	0-5	---	NP
Ardivey-----	0-4	Very gravelly sandy loam	GC-GM	A-2	0	0-15	30-55	25-50	15-30	10-20	20-25	5-10
	4-14	Very gravelly clay loam, very gravelly sandy clay loam, very gravelly loam	GC	A-2	0-5	10-25	40-55	30-45	20-40	15-30	25-40	10-20
	14-60	Extremely gravelly loamy sand	GW, GW-GM	A-1	0-10	10-45	15-35	10-30	5-20	0-10	---	NP
Wardenot-----	0-5	Very gravelly loamy sand	GM, SM	A-1	0	0-10	45-60	35-55	20-40	10-15	---	NP
	5-60	Stratified very gravelly fine sandy loam to extremely cobble loamy sand	GM, GP-GM	A-1	0-5	5-40	25-50	20-45	15-40	5-15	---	NP
2961: Tomel-----	0-3	Very gravelly sandy loam	GM	A-1	0	0	35-60	25-50	20-35	10-25	20-25	NP-5
	3-19	Very gravelly clay loam, very gravelly sandy clay loam	GC	A-2	0	0	40-60	35-50	30-40	20-35	30-35	10-15
	19-26	Indurated			---	---	---	---	---	---	---	---
	26-60	Very gravelly sand, extremely gravelly sand	GW	A-1	0	0-5	20-40	15-35	10-20	0-5	---	NP

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Ashmed-----	0-4	Gravelly fine sandy loam	SM	A-2, A-4	0	0	70-85	60-75	50-65	30-40	15-25	NP-5
	4-7	Gravelly silt loam	ML	A-4	0	0	70-80	60-75	55-70	50-60	25-30	NP-5
	7-24	Extremely gravelly sandy clay loam, extremely gravelly clay loam	GC, GP-GC	A-2	0	0-25	25-35	10-25	5-20	5-15	35-45	20-30
	24-32	Extremely gravelly sandy loam, extremely gravelly coarse sandy loam	GP-GM	A-1	0-5	0-15	25-35	10-25	5-15	5-10	15-25	NP-5
	32-60	Very gravelly coarse sandy loam, extremely gravelly sandy loam	GM, GP-GM	A-1	0	0-10	20-40	15-35	10-25	5-15	15-25	NP-5
3021: Casaga-----	0-1	Gravelly loam	GC-GM, SC-SM, GC	A-4	0	0-5	60-80	50-75	45-65	35-50	20-25	5-10
	1-21	Clay loam, gravelly clay loam	CL, GC	A-6	0	0-5	60-100	55-100	50-100	40-75	35-40	15-20
	21-41	Very gravelly clay loam	GC	A-2, A-6	0	0	30-55	25-50	20-45	15-40	35-40	15-20
	41-60	Stratified gravelly sandy loam to very gravelly sandy loam	GC-GM, GM	A-1	0	0-5	30-55	25-50	15-30	10-20	15-25	NP-5
Destazo-----	0-11	Gravelly clay loam	GC, SC	A-6	0	0	60-85	50-70	40-50	35-45	30-40	10-20
	11-52	Very gravelly clay loam, extremely gravelly sandy clay loam	GC, GW-GC	A-2	0	0	15-55	10-50	10-45	5-35	25-40	10-20
	52-60	Clay loam	CL	A-6	0	0	90-100	85-100	65-80	65-75	25-40	10-20
Yurm-----	0-3	Gravelly loam	SC-SM, GC-GM, SC	A-2, A-4	0	0	60-80	50-75	40-60	30-40	20-25	5-10
	3-16	Very gravelly sandy loam	GM	A-1	0	0	35-55	25-50	15-35	10-20	15-25	NP-5
	16-60	Cemented			---	---	---	---	---	---	---	---
3022: Casaga-----	0-1	Very gravelly loam	GC	A-2, A-6	0	0	30-65	25-55	20-45	20-40	30-35	10-15
	1-21	Clay loam	CL	A-6	0	0-5	90-100	85-100	80-95	65-75	35-40	15-20
	21-41	Very gravelly clay loam, gravelly clay loam	GC	A-2, A-6	0	0	30-60	25-55	25-50	20-40	35-40	15-20
	41-60	Stratified very gravelly sandy loam to gravelly clay loam	GC-GM, GM	A-1, A-2	0	0-5	40-60	35-55	25-35	10-20	15-25	NP-10

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Woda-----	0-1	Sandy loam	SM	A-4	0	0	85-100	80-90	65-70	35-45	0-14	NP
	1-10	Sandy loam	SM	A-4	0	0	85-100	80-90	65-70	35-45	0-14	NP
	10-18	Gravelly clay loam, gravelly loam	CL, GC, SC	A-6	0	0	65-85	55-75	45-65	35-60	30-40	10-20
	18-28	Indurated			---	---	---	---	---	---	---	---
Yermo-----	0-6	Very gravelly sandy loam	GC-GM, GM	A-1, A-2	0	5-20	35-55	30-50	15-45	10-30	15-25	NP-10
	6-60	Stratified gravelly loam to extremely gravelly sandy loam	GC-GM, GM	A-1, A-2	0	10-25	35-55	30-55	15-50	10-35	15-25	NP-10
3052: Bcnnbob-----	0-7	Silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	85-95	35-50	15-25
	7-29	Stratified fine sandy loam to clay	CL	A-6, A-7	0	0	100	100	95-100	85-95	35-45	15-20
	29-38	Loam, silt loam, silty clay loam	CL	A-6, A-7	0	0	100	100	90-100	80-90	30-50	10-25
	38-52	Clay loam, silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	80-90	35-45	15-20
	52-60	Sandy loam	CL-ML, ML	A-4	0	0	100	100	70-90	60-70	20-30	NP-10
Caslo-----	0-1	Silty clay loam	CL	A-7	0	0	100	100	95-100	80-95	45-50	20-25
	1-10	Clay	CH, CL	A-7	0	0	100	100	95-100	80-95	45-65	20-30
	10-60	Stratified sandy loam to clay	ML	A-6, A-7	0	0	100	100	70-85	60-75	35-50	10-20
3101: Bluepoint-----	0-9	Fine sand	SM	A-2, A-4	0	0	100	100	75-85	25-45	---	NP
	9-17	Stratified fine sand to gravelly loamy fine sand	SM	A-2	0	0	70-100	60-90	55-85	10-30	---	NP
	17-41	Loamy fine sand, loamy sand, fine sand	SM	A-2, A-4	0	0	100	100	65-85	25-45	---	NP
	41-60	Stratified sand to very fine sandy loam	ML, SM	A-2, A-4	0	0	100	100	50-90	30-60	---	NP
Besherm-----	0-2	Clay loam	CL	A-6, A-7	0	0	100	100	75-90	65-80	35-50	15-25
	2-11	Clay	CH, CL, MH	A-7	0	0	100	100	90-100	80-90	45-65	20-30
	11-60	Clay loam, clay, silty clay	CH, CL, MH	A-7	0	0	100	100	90-100	80-90	45-60	20-25
3120: Nowoy-----	0-3	Gravelly loamy fine sand	SM	A-2	0	0	65-85	55-75	50-65	10-20	0-14	NP
	3-20	Very gravelly sandy loam	GM	A-1	0	0	40-55	35-50	25-45	15-25	0-14	NP
	20-60	Clay loam, silty clay loam	CL	A-6, A-7	0	0	100	100	90-95	60-85	35-50	15-25

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
					Pct	Pct						
	In				Pct	Pct					Pct	
Tanazza-----	0-2	Very gravelly fine sandy loam	GM	A-1, A-2	0	0	30-55	25-50	20-45	10-35	15-25	NP-5
	2-15	Fine sandy loam, very fine sandy loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	65-80	25-40	5-15
	15-45	Silt loam, silty clay loam, clay loam	CL, ML	A-7	0	0	100	100	100	85-95	40-50	15-20
	45-60	Gypsiferous material			---	---	---	---	---	---	---	---
Yurm-----	0-3	Very gravelly loam	GM	A-1, A-2	0	0	45-65	30-50	25-45	20-35	15-25	NP-5
	3-16	Very gravelly sandy loam	GM	A-1	0	0	35-55	25-50	15-35	10-20	15-25	NP-5
	16-60	Cemented			---	---	---	---	---	---	---	---
3150: Casaga-----	0-1	Gravelly loam	GC-GM, SC-SM, GC	A-4	0	0-5	60-80	50-75	45-65	35-50	20-25	5-10
	1-21	Clay loam, gravelly clay loam	CL, GC	A-6	0	0-5	60-100	55-100	50-100	40-75	35-40	15-20
	21-41	Very gravelly clay loam	GC	A-2, A-6	0	0	30-55	25-50	20-45	15-40	35-40	15-20
	41-60	Stratified gravelly sandy loam to very gravelly sandy loam	GC-GM, GM	A-1	0	0-5	30-55	25-50	15-30	10-20	15-25	NP-5
3230: Alko-----	0-5	Sandy loam	SM	A-2	0	0	100	100	65-75	25-35	15-20	NP-5
	5-11	Gravelly sandy loam, coarse sandy loam	SM	A-1, A-2	0	0-5	75-100	50-100	35-60	15-25	15-25	NP-5
	11-33	Indurated			---	---	---	---	---	---	---	---
	33-60	Coarse sand, gravelly coarse sand	SP, SW-SM	A-1	0	0-10	75-90	55-85	25-40	0-10	0-14	NP
Casaga-----	0-1	Gravelly loam	CL, GC	A-6	0	0	65-75	55-70	50-70	45-60	30-35	10-15
	1-21	Clay loam	CL	A-6	0	0-5	90-100	85-100	80-95	65-75	35-40	15-20
	21-41	Very gravelly clay loam, gravelly clay loam	GC	A-2, A-6	0	0	30-60	25-55	25-50	20-40	35-40	15-20
	41-60	Stratified very gravelly sandy loam to gravelly clay loam	GC-GM, GM	A-1, A-2	0	0-5	40-60	35-55	25-35	10-20	15-25	NP-10
3252: Bobnbob-----	0-7	Fine sandy loam	CL-ML, ML	A-4	0	0	100	100	85-95	60-70	20-30	NP-10
	7-29	Stratified fine sandy loam to clay	CL	A-6, A-7	0	0	100	100	95-100	85-95	35-45	15-20
	29-38	Loam, silt loam, silty clay loam	CL	A-6, A-7	0	0	100	100	90-100	80-90	30-50	10-25
	38-52	Clay loam, silty clay loam	CL	A-6, A-7	0	0	100	100	95-100	80-90	35-45	15-20
	52-60	Sandy loam	CL-ML, ML	A-4	0	0	100	100	70-90	60-70	20-30	NP-10

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percentage passing sieve number--				Liquid limit	Plas- ticity index
			Unified	AASHTO	>10 inches	3-10 inches	4	10	40	200		
	In				Pct	Pct					Pct	
Cobatus-----	0-2	Loam	CL, CL-ML	A-4, A-6	0	0	100	90-100	75-85	50-65	25-35	5-15
	2-14	Loam, silt loam	CL, CL-ML	A-4, A-6	0	0	95-100	85-100	75-85	50-65	25-35	5-15
	14-60	Loam, clay loam, silt loam	CL	A-6	0	0	100	100	75-85	60-75	30-40	10-20
3302:												
Rumpah-----	0-3	Clay	CH, CL, MH	A-7	0	0	100	100	95-100	80-95	45-65	20-30
	3-54	Clay, silty clay	CH, MH	A-7	0	0	100	100	95-100	80-95	50-70	25-35
	54-60	Clay, silty clay	CH, CL, MH	A-7	0	0	100	100	95-100	80-95	45-70	20-35
3313:												
Besherm-----	0-2	Clay loam	CL	A-6, A-7	0	0	100	100	75-90	65-80	35-50	15-25
	2-11	Clay	CH, CL, MH	A-7	0	0	100	100	90-100	80-90	45-65	20-30
	11-60	Clay loam, clay, silty clay	CL, MH, CH	A-7	0	0	100	100	90-100	80-90	45-60	20-25
3320:												
Haymont-----	0-3	Very fine sandy loam	SM	A-4	0	0	100	100	85-100	35-50	15-25	NP-5
	3-40	Stratified very fine sandy loam to silt loam	ML	A-4	0	0	100	100	85-100	50-70	15-25	NP-5
	40-60	Stratified fine sandy loam to silt loam	CL-ML, ML	A-4	0	0	100	100	80-90	50-75	15-30	NP-10
3333:												
Nopah-----	0-6	Loam	CL-ML, ML	A-4	0	0	100	100	80-90	70-85	20-30	NP-10
	6-60	Stratified loam to clay	CL, ML	A-6, A-7	0	0	100	100	95-100	85-95	30-50	10-20
4010:												
Tanazza-----	0-2	Fine sandy loam	ML	A-4	0	0	80-100	75-100	65-80	50-65	15-25	NP-5
	2-15	Fine sandy loam, very fine sandy loam, silt loam	CL, CL-ML	A-4, A-6	0	0	100	100	95-100	65-80	25-40	5-15
	15-45	Silt loam, silty clay loam, clay loam	CL, ML	A-7	0	0	100	100	100	85-95	40-50	15-20
	45-60	Gypsiferous material			---	---	---	---	---	---	---	---
Wechech-----												
	0-2	Very gravelly sandy loam	GM, GP-GM	A-1	0	0-15	40-60	30-50	20-30	5-25	---	NP
	2-13	Very gravelly fine sandy loam, very gravelly sandy loam	GM, SM	A-1	0	0-15	30-65	25-55	15-45	10-25	20-25	NP-5
	13-17	Indurated			---	---	---	---	---	---	---	---
Wodavar-----												
	0-3	Extremely gravelly fine sandy loam	GM, GP-GM	A-1	0	0	25-35	15-25	10-20	5-15	15-25	NP-5
	3-16	Very gravelly sandy loam	GM	A-1, A-2	0	0	35-60	25-50	20-40	10-30	15-25	NP-5
	16-33	Indurated			---	---	---	---	---	---	---	---
	33-60	Very gravelly loam	GM	A-1	0	0	35-60	25-50	20-45	20-25	20-25	NP-5

TABLE 11.--ENGINEERING INDEX PROPERTIES--Continued

[illegible]

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS

(Entries under "Erosion factors--T" apply to the entire profile. Entries under "Wind erodibility group" and "Wind erodibility index" apply only to the surface layer. Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
1314:												
Weiser-----	0-6	5-18	1.25-1.45	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32	5	6	48
	6-60	5-18	1.25-1.45	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.15	.32			
Wechech-----	0-2	10-18	1.30-1.45	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.05	.32	1	6	48
	2-13	10-18	1.35-1.50	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.32			
	13-60	---	---	0.0000-0.0015	---	---	---	---	---			
1321:												
Boxspring-----	0-2	10-18	1.40-1.60	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.15	.43	1	7	38
	2-15	10-18	1.45-1.60	0.6-2	0.09-0.11	0.0-2.9	0.0-0.5	.17	.43			
	15-25	---	---	0.0000-0.0015	---	---	---	---	---			
Seralin-----	0-2	10-18	1.40-1.55	0.6-2	0.03-0.05	0.0-2.9	0.8-2.0	.10	.49	1	8	0
	2-7	10-18	1.35-1.55	0.6-2	0.06-0.08	0.0-2.9	1.0-2.0	.20	.49			
	7-14	10-18	1.35-1.55	0.6-2	0.08-0.10	0.0-2.9	0.0-0.5	.17	.43			
	14-20	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	---	---	---
2002:												
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	---	---	---
Upspring-----	0-8	10-18	1.25-1.45	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	8-12	10-18	1.30-1.50	2-6	0.04-0.09	0.0-2.9	0.0-0.5	.17	.24			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
Rubble Land-----	0-60	0-0	1.70-2.35	20-101	0.00-0.10	0.0-2.9	0.0-0.1	---	---	5	8	0
2004:												
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	---	---	---
Zyplar-----	0-7	8-18	1.40-1.55	2-6	0.07-0.09	0.0-2.9	0.5-1.0	.17	.32	1	5	56
	7-12	25-35	1.40-1.55	0.6-2	0.12-0.14	3.0-5.9	0.0-0.5	.24	.43			
	12-16	---	---	0.0000-0.0015	---	---	---	---	---			
2005:												
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	---	---	---
St. Thomas-----	0-3	4-10	1.15-1.35	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.17	.32	1	8	0
	3-12	8-18	1.15-1.35	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.10	.37			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
St. Thomas-----	0-2	4-10	1.15-1.35	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.17	.32	1	8	0
	2-12	8-18	1.15-1.35	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.10	.37			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
2010:												
Longjim-----	0-3	10-20	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.17	.32	1	4	86
	3-8	10-20	1.35-1.50	0.6-2	0.13-0.14	0.0-2.9	0.0-0.5	.28	.49			
	8-16	5-10	1.40-1.60	2-6	0.04-0.05	0.0-2.9	0.0-0.5	.15	.32			
	16-20	---	---	0.0000-0.0015	---	---	---	---	---			
	20-45	---	---	0.0015-0.06	---	---	---	---	---			
2011:												
Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			
Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
2012:	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Zalda-----	0-3	6-18	1.35-1.50	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.32	1	4	86
	3-7	6-18	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.28	.43			
	7-8	---	---	0.0000-0.0015	---	---	---	---	---			
	8-18	---	---	0.0000-0.0015	---	---	---	---	---			
Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
Upspring-----	0-2	10-18	1.25-1.45	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	2-12	10-18	1.30-1.50	2-6	0.04-0.09	0.0-2.9	0.0-0.5	.17	.24			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
2020:												
Weiser-----	0-6	5-18	1.25-1.45	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	6-60	5-18	1.25-1.45	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.15	.32			
Canoto-----	0-11	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.28	5	5	56
	11-60	5-15	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.20			
2021:												
Weiser-----	0-6	5-18	1.25-1.45	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	6-60	5-18	1.25-1.45	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.15	.32			
Nickel-----	0-7	3-8	1.25-1.45	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.15	.28	5	4	86
	7-19	5-10	1.30-1.50	0.2-0.6	0.04-0.06	0.0-2.9	0.0-0.5	.05	.32			
	19-60	3-8	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.05	.32			
2023:												
Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
Sezna-----	0-3	5-15	1.45-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.20	.43	1	4	86
	3-18	25-35	1.35-1.55	0.2-0.6	0.08-0.10	3.0-5.9	0.0-0.5	.15	.37			
	18-60	---	---	0.0000-0.0015	---	---	---	---	---			
2030:												
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28	4	4	86
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			
2031:												
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28	4	4	86
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	2	4	86
	4-28	3-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2040:												
Yurm-----	0-3	5-10	1.25-1.45	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.37	1	5	56
	3-16	5-18	1.50-1.70	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.37			
	16-60	---	---	0.0015-0.06	---	---	---	---	---			
Canoto-----	0-11	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.28	5	5	56
	11-60	5-15	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.20			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2050:												
Canoto-----	0-11	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.28	5	5	56
	11-60	5-15	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.20			
Naye-----	0-7	5-18	1.50-1.65	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	2	5	56
	7-25	5-18	1.50-1.65	0.6-2	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32			
	25-39	---	---	0.0000-0.0015	---	---	---	---	---			
2051:												
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Woda-----	0-1	5-10	1.35-1.55	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.37	.43	1	3	86
	1-10	5-10	1.35-1.55	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.37	.43			
	10-18	20-30	1.25-1.45	0.2-0.6	0.16-0.18	0.0-2.9	0.0-0.5	.24	.43			
	18-60	---	---	0.0000-0.0015	---	---	---	---	---			
Nowoy-----	0-3	3-8	1.50-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.10	.28	3	3	86
	3-20	5-10	1.40-1.60	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.10	.32			
	20-60	27-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.37	.37			
2052:												
Canoto-----	0-11	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.28	5	5	56
	11-60	5-15	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.20			
2053:												
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
Arizo-----	0-8	5-15	1.45-1.65	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32	5	8	0
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.24			
2054:												
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2057:												
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
2058:												
Canoto-----	0-11	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.28	5	5	56
	11-60	5-15	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.20			
Nickel-----	0-7	10-18	1.25-1.45	0.6-2	0.11-0.13	0.0-2.9	0.0-0.5	.20	.37	5	5	56
	7-19	5-10	1.30-1.50	0.2-0.6	0.04-0.06	0.0-2.9	0.0-0.5	.05	.32			
	19-60	3-8	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.05	.32			
2060:												
Purob-----	0-3	8-18	1.30-1.45	0.6-2	0.03-0.07	0.0-2.9	0.1-0.7	.10	.43	1	4L	86
	3-10	8-18	1.30-1.45	0.6-2	0.09-0.14	0.0-2.9	0.0-0.5	.20	.43			
	10-19	8-18	1.30-1.45	0.6-2	0.05-0.11	0.0-2.9	0.0-0.5	.15	.43			
	19-60	---	---	0.0000-0.0015	---	---	---	---	---			
Irongold-----	0-1	8-16	1.40-1.55	0.6-2	0.04-0.06	0.0-2.9	0.0-0.5	.10	.49	1	6	48
	1-7	8-16	1.35-1.55	0.6-2	0.12-0.18	0.0-2.9	0.0-0.5	.28	.43			
	7-11	8-16	1.35-1.55	0.6-2	0.06-0.10	0.0-2.9	0.0-0.5	.20	.49			
	11-34	---	---	0.0015-0.06	---	---	---	---	---			
	34-60	2-8	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.24			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2061: Vace-----	0-12	10-20	1.20-1.40	0.6-2	0.07-0.12	0.0-2.9	0.0-0.5	.20	.37	1	4	86
	12-30	---	---	0.0000-0.0015	---	---	---	---	---			
	30-60	2-5	1.50-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2062: Purob-----	0-3	10-20	1.10-1.30	2-6	0.09-0.11	0.0-2.9	0.8-2.0	.15	.28	1	4	86
	3-19	18-25	1.10-1.30	2-6	0.12-0.14	3.0-5.9	0.5-1.0	.24	.43			
	19-26	---	---	0.0000-0.0015	---	---	---	---	---			
Canoto-----	0-11	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.28	5	5	56
	11-60	5-15	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.20			
2070: Shamock-----	0-4	3-8	1.50-1.70	2-6	0.10-0.12	0.0-2.9	0.0-0.8	.17	.32	2	4	86
	4-37	5-10	1.55-1.70	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.17	.32			
	37-58	---	---	0.0015-0.06	---	---	---	---	---			
	58-60	---	---	0.0000-0.0015	---	---	---	---	---			
2071: Shamock-----	0-4	3-8	1.50-1.70	2-6	0.10-0.12	0.0-2.9	0.0-0.8	.17	.32	2	4	86
	4-37	5-10	1.55-1.70	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.17	.32			
	37-58	---	---	0.0015-0.06	---	---	---	---	---			
	58-60	---	---	0.0000-0.0015	---	---	---	---	---			
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	4-28	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.17			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.15			
2080: St. Thomas-----	0-3	4-10	1.15-1.35	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.17	.32	1	5	56
	3-12	8-18	1.15-1.35	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.10	.37			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---
Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
2081: St. Thomas-----	0-3	4-10	1.15-1.35	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.17	.32	1	5	56
	3-12	8-18	1.15-1.35	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.10	.37			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
Tecopa-----	0-1	4-10	1.40-1.50	2-6	0.03-0.05	0.0-2.9	0.0-0.5	.10	.24	1	8	0
	1-7	6-10	1.35-1.55	0.6-2	0.04-0.06	0.0-2.9	0.0-0.5	.15	.24			
	7-17	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---
2090: Breko-----	0-6	5-18	1.40-1.55	2-6	0.10-0.12	0.0-2.9	1.0-2.0	.15	.28	3	4	86
	6-21	25-35	1.40-1.60	0.2-0.6	0.12-0.15	3.0-5.9	0.5-1.0	.10	.32			
	21-29	25-35	1.40-1.60	0.2-0.6	0.05-0.08	3.0-5.9	0.5-1.0	.05	.32			
	29-60	5-15	1.50-1.70	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.20			
Veet-----	0-5	8-15	1.35-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	3	5	56
	5-20	10-18	1.35-1.55	0.6-2	0.06-0.08	0.0-2.9	0.0-0.5	.10	.37			
	20-60	5-10	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.10	.32			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2110: Pahrump-----	0-2	5-15	1.30-1.40	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.32	.32	3	3	86
	2-16	10-15	1.20-1.30	0.6-2	0.15-0.17	0.0-2.9	0.0-0.5	.37	.37			
	16-42	18-27	1.00-1.10	0.2-0.6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.55			
	42-60	5-18	1.00-1.10	0.6-2	0.15-0.17	0.0-2.9	0.0-0.5	.37	.37			
2121: Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
Arizo-----	0-8	2-8	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.24	5	4	86
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2131: Upspring-----	0-2	10-18	1.25-1.45	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	2-12	10-18	1.30-1.50	2-6	0.04-0.09	0.0-2.9	0.0-0.5	.17	.24			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
Shorim-----	0-3	5-15	1.45-1.60	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.10	.32	2	5	56
	3-10	5-15	1.40-1.60	2-6	0.07-0.08	0.0-2.9	0.0-0.5	.15	.32			
	10-21	5-15	1.35-1.55	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.10	.32			
	21-24	---	---	0.0000-0.0015	---	---	---	---	---			
	24-30	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---
2140: Jonnic-----	0-2	20-25	1.30-1.50	0.6-2	0.06-0.07	0.0-2.9	1.0-2.0	.05	.43	2	5	56
	2-21	35-55	1.25-1.40	0.06-0.2	0.10-0.12	3.0-5.9	0.5-2.0	.10	.32			
	21-38	25-35	1.30-1.50	0.2-0.6	0.04-0.05	3.0-5.9	0.0-0.5	.05	.49			
	38-42	---	---	0.0000-0.0015	---	---	---	---	---			
Canoto-----	0-11	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.28	5	5	56
	11-60	5-15	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.20			
2151: Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
Bluepoint-----	0-9	2-6	1.45-1.65	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17	5	2	134
	9-17	2-6	1.50-1.65	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.10	.28			
	17-41	2-6	1.50-1.65	6-20	0.05-0.09	0.0-2.9	0.0-0.5	.17	.17			
	41-60	2-10	1.50-1.65	2-6	0.05-0.14	0.0-2.9	0.0-0.5	.24	.24			
Dune Land-----	0-6	0-1	1.50-1.60	6-20	0.04-0.05	0.0-2.9	0.0-0.1	.15	.20	5	1	250
	6-60	0-1	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.10	.20			
2152: Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2153: Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.10	.37	4	5	56
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2161: Casaga-----	0-1	20-27	1.40-1.60	0.6-2	0.16-0.18	3.0-5.9	0.0-0.5	.24	.43	4	5	56
	1-21	27-35	1.45-1.60	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.32	.37			
	21-41	27-35	1.40-1.60	0.2-0.6	0.08-0.11	3.0-5.9	0.0-0.5	.17	.49			
	41-60	8-18	1.15-1.35	2-6	0.06-0.10	0.0-2.9	0.0-0.5	.10	.28			
Nowoy-----	0-3	3-8	1.50-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.10	.28	3	3	86
	3-20	5-10	1.40-1.60	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.10	.32			
	20-60	27-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.37	.37			
2162: Casaga-----	0-1	10-18	1.45-1.60	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.20	.37	5	5	56
	1-21	27-35	1.45-1.60	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.32	.43			
	21-41	27-35	1.40-1.60	0.2-0.6	0.08-0.11	3.0-5.9	0.0-0.5	.17	.55			
	41-60	8-18	1.15-1.35	2-6	0.06-0.10	0.0-2.9	0.0-0.5	.10	.37			
Panor-----	0-1	30-35	1.25-1.40	0.2-0.6	0.19-0.20	3.0-5.9	0.0-0.5	.24	.24	5	4L	86
	1-5	10-20	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.0-0.5	.49	.49			
	5-23	27-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.24	.24			
	23-60	27-35	1.25-1.45	0.2-0.6	0.14-0.16	3.0-5.9	0.0-0.5	.15	.43			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
2171: Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	4-28	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.17			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.15			
2172: Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
2181: Skelon-----	0-4	5-10	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	2	4	86
	4-28	3-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Pinez-----	0-4	5-10	1.50-1.65	6-20	0.03-0.04	0.0-2.9	0.0-0.5	.05	.17	3	4	86
	4-10	10-15	1.45-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.37			
	10-29	18-35	1.35-1.50	0.2-0.6	0.04-0.13	3.0-5.9	0.0-0.5	.10	.32			
	29-41	3-8	1.70-1.85	6-20	0.01-0.03	0.0-2.9	0.0-0.5	.02	.24			
	41-51	---	---	0.0000-0.0015	---	---	---	---	---			
2184: Skelon-----	0-4	5-10	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	2	4	86
	4-28	3-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
Bullfor-----	0-1	2-5	1.50-1.70	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.10	.17	2	3	86
	1-24	2-5	1.50-1.70	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.17	.20			
	24-25	---	---	0.06-0.2	---	---	---	---	---			
	25-60	5-10	1.55-1.75	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.43			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2185:												
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	4-28	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.17			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.15			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Ashmed-----	0-4	5-15	1.35-1.55	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.20	.32	5	4	86
	4-7	10-15	1.30-1.50	0.2-0.6	0.16-0.19	0.0-2.9	0.0-0.5	.28	.43			
	7-24	25-35	1.25-1.40	0.2-0.6	0.10-0.12	0.0-2.9	0.0-0.5	.05	.37			
	24-32	5-15	1.45-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	32-60	5-15	1.55-1.75	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.05	.24			
2186:												
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	2	4	86
	4-28	3-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Pinez-----	0-4	5-10	1.50-1.65	6-20	0.03-0.04	0.0-2.9	0.0-0.5	.05	.17	3	4	86
	4-10	10-15	1.45-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.37			
	10-29	18-35	1.35-1.50	0.2-0.6	0.04-0.13	3.0-5.9	0.0-0.5	.10	.32			
	29-41	3-8	1.70-1.85	6-20	0.01-0.03	0.0-2.9	0.0-0.5	.02	.24			
	41-51	---	---	0.0000-0.0015	---	---	---	---	---			
2191:												
Pinez-----	0-4	5-10	1.50-1.65	6-20	0.03-0.04	0.0-2.9	0.0-0.5	.05	.17	3	4	86
	4-10	10-15	1.45-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.37			
	10-29	18-35	1.35-1.50	0.2-0.6	0.04-0.13	3.0-5.9	0.0-0.5	.10	.32			
	29-41	3-8	1.70-1.85	6-20	0.01-0.03	0.0-2.9	0.0-0.5	.02	.24			
	41-51	---	---	0.0000-0.0015	---	---	---	---	---			
Lealandic-----	0-5	8-20	1.40-1.55	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	5-12	35-50	1.25-1.45	0.06-0.2	0.10-0.12	6.0-8.9	0.0-0.5	.15	.32			
	12-23	35-50	1.25-1.40	0.06-0.2	0.07-0.10	6.0-8.9	0.0-0.5	.10	.43			
	23-40	---	---	0.0000-0.0015	---	---	---	---	---			
Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2201:												
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.10	.37	4	5	56
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			
Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2202:												
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28	4	4	86
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			
Migern-----	0-3	8-14	1.40-1.60	2-6	0.11-0.13	0.0-2.9	0.5-1.0	.15	.24	5	4	86
	3-8	20-30	1.30-1.50	0.2-0.6	0.14-0.18	3.0-5.9	0.0-0.5	.15	.28			
	8-60	2-5	1.55-1.75	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.10	.20			
Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2204:												
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28	4	4	86
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			
Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			
Wodavar-----	0-3	8-16	1.45-1.60	2-6	0.03-0.05	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	3-16	8-16	1.45-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32			
	16-33	---	---	0.0000-0.0015	---	---	---	---	---			
	33-60	10-18	1.45-1.55	0.6-2	0.07-0.11	0.0-2.9	0.0-0.5	.15	.49			
2212:												
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Bullfor-----	0-1	2-5	1.50-1.70	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.10	.17	2	3	86
	1-24	2-5	1.50-1.70	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.17	.20			
	24-25	---	---	0.06-0.2	---	---	---	---	---			
	25-60	5-10	1.55-1.75	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.43			
2214:												
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2215:												
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Greeyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
2216:												
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Arizo-----	0-8	2-8	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.24	5	4	86
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2218:												
Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			
Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
2220:												
Canoto-----	0-11	8-18	1.40-1.60	0.6-2	0.12-0.14	0.0-2.9	0.0-0.5	.05	.32	5	6	48
	11-60	5-15	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.1-0.5	.05	.20			
Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2221:												
Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
2230:												
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	2	4	86
	4-28	3-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2233:												
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Bluepoint-----	0-9	2-6	1.45-1.65	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17	5	2	134
	9-17	2-6	1.50-1.65	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.10	.28			
	17-41	2-6	1.50-1.65	6-20	0.05-0.09	0.0-2.9	0.0-0.5	.17	.17			
	41-60	2-10	1.50-1.65	2-6	0.05-0.14	0.0-2.9	0.0-0.5	.24	.24			
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	2	4	86
	4-28	3-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2250:												
Tokoper-----	0-3	8-15	1.40-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.24	.32	1	5	56
	3-9	20-30	1.30-1.50	0.2-0.6	0.15-0.18	3.0-5.9	0.0-0.5	.15	.49			
	9-14	15-25	1.35-1.55	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.05	.37			
	14-15	---	---	0.0000-0.0015	---	---	---	---	---			
	15-25	---	---	0.0000-0.0015	---	---	---	---	---			
Upspring-----	0-2	10-18	1.25-1.45	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	2-12	10-18	1.30-1.50	2-6	0.04-0.09	0.0-2.9	0.0-0.5	.17	.24			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	---	---	---
2251:												
Tokoper-----	0-3	8-15	1.40-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.24	.32	1	5	56
	3-9	20-30	1.30-1.50	0.2-0.6	0.15-0.18	3.0-5.9	0.0-0.5	.15	.49			
	9-14	15-25	1.35-1.55	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.05	.37			
	14-15	---	---	0.0000-0.0015	---	---	---	---	---			
	15-25	---	---	0.0000-0.0015	---	---	---	---	---			
Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Pintwater-----	0-3	10-18	1.35-1.55	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.15	.32	1	5	56
	3-11	10-18	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.10	.32			
	11-15	---	---	0.0000-0.0015	---	---	---	---	---			
2252:												
Tokoper-----	0-3	8-15	1.40-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.24	.32	1	5	56
	3-9	20-30	1.30-1.50	0.2-0.6	0.15-0.18	3.0-5.9	0.0-0.5	.15	.49			
	9-14	15-25	1.35-1.55	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.05	.37			
	14-15	---	---	0.0000-0.0015	---	---	---	---	---			
	15-25	---	---	0.0000-0.0015	---	---	---	---	---			
Blacktop-----	0-7	10-18	1.30-1.50	0.6-2	0.04-0.08	0.0-2.9	0.0-0.5	.20	.32	1	5	56
	7-17	---	---	0.0000-0.0015	---	---	---	---	---			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2253: Tokoper-----	0-3	8-15	1.40-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.24	.32	1	5	56
	3-9	20-30	1.30-1.50	0.2-0.6	0.15-0.18	3.0-5.9	0.0-0.5	.15	.49			
	9-14	15-25	1.35-1.55	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.05	.37			
	14-15	---	---	0.0000-0.0015	---	---	---	---	---			
	15-25	---	---	0.0000-0.0015	---	---	---	---	---			
Ardivey-----	0-3	12-18	1.35-1.55	2-6	0.05-0.08	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	3-14	18-35	1.30-1.45	0.2-0.6	0.08-0.13	0.0-2.9	0.0-0.5	.10	.43			
	14-60	6-12	1.45-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.24			
2254: Tokoper-----	0-3	8-15	1.40-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.24	.32	1	5	56
	3-9	20-30	1.30-1.50	0.2-0.6	0.15-0.18	3.0-5.9	0.0-0.5	.15	.49			
	9-14	15-25	1.35-1.55	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.05	.37			
	14-15	---	---	0.0000-0.0015	---	---	---	---	---			
	15-25	---	---	0.0000-0.0015	---	---	---	---	---			
Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Espint-----	0-1	10-18	1.30-1.50	2-6	0.08-0.10	0.0-2.9	0.7-2.0	.05	.32	2	5	56
	1-7	35-50	1.20-1.40	0.06-0.2	0.12-0.18	6.0-8.9	0.5-1.0	.17	.37			
	7-17	---	---	0.0015-0.06	---	---	---	---	---			
2260: Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
2261: Longjim-----	0-3	10-20	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.17	.32	1	4	86
	3-8	10-20	1.35-1.50	0.6-2	0.13-0.14	0.0-2.9	0.0-0.5	.28	.49			
	8-16	5-10	1.40-1.60	2-6	0.04-0.05	0.0-2.9	0.0-0.5	.15	.32			
	16-20	---	---	0.0000-0.0015	---	---	---	---	---			
	20-45	---	---	0.0015-0.06	---	---	---	---	---			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Dedas-----	0-3	5-8	1.40-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.6	.10	.37	1	5	56
	3-15	10-18	1.40-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.6	.10	.37			
	15-17	---	---	0.0000-0.0015	---	---	---	---	---			
	17-27	---	---	0.0000-0.0015	---	---	---	---	---			
2263: Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
2266: Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind	Wind
								Kw	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2267: Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	4-28	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.17			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.15			
2268: Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
Arizo-----	0-8	2-8	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.24	5	4	86
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2269: Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Strozi-----	0-5	5-15	1.35-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	3	4	86
	5-13	27-35	1.35-1.50	0.2-0.6	0.17-0.19	3.0-5.9	0.0-0.5	.32	.37			
	13-32	5-10	1.55-1.75	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32			
	32-33	---	---	0.06-0.2	---	---	---	---	---			
	33-60	5-10	1.55-1.75	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.10	.37			
2270: Bluepoint-----	0-9	2-6	1.45-1.65	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17	5	2	134
	9-24	2-6	1.50-1.65	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.10	.28			
	24-41	2-6	1.50-1.65	6-20	0.05-0.09	0.0-2.9	0.0-0.5	.17	.17			
	41-60	2-10	1.50-1.65	2-6	0.05-0.14	0.0-2.9	0.0-0.5	.24	.24			
2271: Kawich-----	0-2	0-5	1.50-1.65	20-101	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	5	1	250
	2-60	0-5	1.50-1.65	20-101	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28	4	4	86
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			
Wanomie-----	0-2	5-10	1.45-1.60	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.28	.32	3	3	86
	2-30	5-18	1.50-1.70	0.6-2	0.11-0.13	0.0-2.9	0.0-0.5	.32	.32			
	30-31	---	---	0.0015-0.06	---	---	---	---	---			
	31-60	5-10	1.55-1.75	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.28	.32			
Playas-----	---	---	---	---	---	---	---	---	---	-	---	---

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind	Wind
								Kw	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2280: Shorim-----	0-3	5-15	1.45-1.60	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.10	.32	2	5	56
	3-10	5-15	1.40-1.60	2-6	0.07-0.08	0.0-2.9	0.0-0.5	.15	.32			
	10-21	5-15	1.35-1.55	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.10	.32			
	21-24	---	---	0.0000-0.0015	---	---	---	---	---			
	24-28	---	---	0.0000-0.0015	---	---	---	---	---			
Upspring-----	0-2	10-18	1.25-1.45	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	2-12	10-18	1.30-1.50	2-6	0.04-0.09	0.0-2.9	0.0-0.5	.17	.24			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
Zalda-----	0-3	6-18	1.35-1.50	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.32	1	4	86
	3-7	6-18	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.28	.43			
	7-8	---	---	0.0000-0.0015	---	---	---	---	---			
	8-18	---	---	0.0000-0.0015	---	---	---	---	---			
2281: Shorim-----	0-3	5-15	1.45-1.60	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.10	.32	2	5	56
	3-10	5-15	1.40-1.60	2-6	0.07-0.08	0.0-2.9	0.0-0.5	.15	.32			
	10-21	5-15	1.35-1.55	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.10	.32			
	21-24	---	---	0.0000-0.0015	---	---	---	---	---			
	24-28	---	---	0.0000-0.0015	---	---	---	---	---			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
2282: Dedas-----	0-3	5-8	1.40-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.6	.10	.37	1	5	56
	3-15	10-18	1.40-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.6	.10	.37			
	15-17	---	---	0.0000-0.0015	---	---	---	---	---			
	17-27	---	---	0.0000-0.0015	---	---	---	---	---			
Orwash-----	0-3	3-7	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	5	4	86
	3-18	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
	18-60	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
2290: Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-16	---	---	0.0000-0.0015	---	---	---	---	---			
Upspring-----	0-2	10-18	1.25-1.45	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	2-12	10-18	1.30-1.50	2-6	0.04-0.09	0.0-2.9	0.0-0.5	.17	.24			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
Rubble Land-----	0-60	0-0	1.70-2.35	20-101	0.00-0.10	0.0-2.9	0.0-0.1	---	---	5	8	0
2291: Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-16	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---
2301: Tecopa-----	0-1	4-10	1.40-1.50	2-6	0.03-0.05	0.0-2.9	0.0-0.5	.10	.24	1	8	0
	1-7	6-10	1.35-1.55	0.6-2	0.04-0.06	0.0-2.9	0.0-0.5	.15	.24			
	7-17	---	---	0.0000-0.0015	---	---	---	---	---			
Haleburu-----	0-2	6-12	1.50-1.70	2-6	0.03-0.04	0.0-2.9	0.0-0.5	.02	.24	1	8	0
	2-11	6-18	1.50-1.70	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.20			
	11-15	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2302: Tecopa-----	0-1	4-10	1.40-1.50	2-6	0.03-0.05	0.0-2.9	0.0-0.5	.10	.24	1	8	0
	1-7	6-10	1.35-1.55	0.6-2	0.04-0.06	0.0-2.9	0.0-0.5	.15	.24			
	7-17	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---
Upspring-----	0-2	10-18	1.25-1.45	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	2-12	10-18	1.30-1.50	2-6	0.04-0.09	0.0-2.9	0.0-0.5	.17	.24			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
2310: Nowoy-----	0-3	3-8	1.50-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.10	.28	3	3	86
	3-20	5-10	1.40-1.60	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.10	.32			
	20-60	27-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.37	.37			
Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
2312: Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
Tanazza-----	0-2	5-15	1.35-1.55	0.6-2	0.13-0.15	0.0-2.9	0.0-0.5	.28	.32	4	3	86
	2-15	15-25	1.20-1.40	0.2-0.6	0.13-0.20	3.0-5.9	0.0-0.5	.49	.49			
	15-45	25-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.43	.43			
	45-60	0-0	1.15-1.35	0.06-20	---	---	---	---	---			
2320: Wahguyhe-----	0-2	5-15	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.32	1	5	56
	2-16	5-15	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.37			
	16-20	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---
Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-16	---	---	0.0000-0.0015	---	---	---	---	---			
2341: Naye-----	0-7	5-18	1.50-1.65	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.20	.37	2	4	86
	7-25	5-18	1.50-1.65	0.6-2	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32			
	25-39	---	---	0.0000-0.0015	---	---	---	---	---			
2372: Bluepoint-----	0-9	2-6	1.45-1.65	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17	5	2	134
	9-17	2-6	1.50-1.65	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.10	.28			
	17-41	2-6	1.50-1.65	6-20	0.05-0.09	0.0-2.9	0.0-0.5	.17	.17			
	41-60	2-10	1.50-1.65	2-6	0.05-0.14	0.0-2.9	0.0-0.5	.24	.24			
Zalda-----	0-3	6-18	1.35-1.50	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.32	1	4	86
	3-7	6-18	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.28	.43			
	7-8	---	---	0.0000-0.0015	---	---	---	---	---			
	8-18	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2373: Zalda-----	0-3	6-18	1.35-1.50	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.32	1	5	56
	3-7	6-18	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.28	.43			
	7-8	---	---	0.0000-0.0015	---	---	---	---	---			
	8-18	---	---	0.0000-0.0015	---	---	---	---	---			
Rubble Land-----	0-60	0-0	1.70-2.35	20-101	0.00-0.10	0.0-2.9	0.0-0.1	---	---	5	8	0
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	4-28	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.17			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.15			
2381: Armpup-----	0-3	25-35	1.40-1.60	0.6-2	0.12-0.14	0.0-2.9	0.0-0.5	.15	.37	2	7	38
	3-18	35-45	1.25-1.45	0.06-0.2	0.14-0.16	6.0-8.9	0.0-0.5	.20	.32			
	18-46	35-45	1.25-1.45	0.06-0.2	0.15-0.17	3.0-5.9	0.0-0.5	.05	.37			
	46-55	5-10	1.40-1.60	6-20	0.06-0.11	0.0-2.9	0.0-0.5	.10	.37			
	55-59	---	---	0.0015-0.06	---	---	---	---	---			
Ashmed-----	0-4	5-15	1.35-1.55	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.20	.32	5	4	86
	4-7	10-15	1.30-1.50	0.2-0.6	0.16-0.19	0.0-2.9	0.0-0.5	.28	.43			
	7-24	25-35	1.25-1.40	0.2-0.6	0.10-0.12	0.0-2.9	0.0-0.5	.05	.37			
	24-32	5-15	1.45-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	32-60	5-15	1.55-1.75	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.05	.24			
2391: Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
Ashmed-----	0-4	5-15	1.35-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32	5	8	0
	4-7	10-15	1.30-1.50	0.2-0.6	0.16-0.19	0.0-2.9	0.0-0.5	.28	.43			
	7-24	25-35	1.25-1.40	0.2-0.6	0.10-0.12	0.0-2.9	0.0-0.5	.05	.37			
	24-32	5-15	1.45-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	32-60	5-15	1.55-1.75	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.05	.24			
2392: Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
Ashmed-----	0-4	5-15	1.35-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32	5	8	0
	4-7	10-15	1.30-1.50	0.2-0.6	0.16-0.19	0.0-2.9	0.0-0.5	.28	.43			
	7-24	25-35	1.25-1.40	0.2-0.6	0.10-0.12	0.0-2.9	0.0-0.5	.05	.37			
	24-32	5-15	1.45-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	32-60	5-15	1.55-1.75	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.05	.24			
2393: Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
2400: Mobl-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	3	5	56
	2-7	20-30	1.40-1.60	0.2-0.6	0.13-0.19	3.0-5.9	0.0-0.5	.24	.24			
	7-17	5-15	1.40-1.60	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.17	.17			
	17-60	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.28			
Scottcas-----	0-2	5-15	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.17	.32	2	5	56
	2-7	20-30	1.25-1.45	0.2-0.6	0.11-0.13	3.0-5.9	0.0-0.5	.10	.32			
	7-15	5-15	1.45-1.65	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.05	.32			
	15-21	4-10	1.45-1.65	6-20	0.02-0.05	0.0-2.9	0.0-0.5	.02	.10			
	21-60	4-10	1.45-1.65	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.37			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2401:												
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	4-28	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.17			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.15			
Bacho-----	0-3	5-18	1.40-1.55	2-6	0.03-0.06	0.0-2.9	0.5-1.0	.05	.32	1	5	56
	3-11	35-50	1.25-1.40	0.0015-0.06	0.15-0.19	3.0-5.9	0.0-0.5	.10	.32			
	11-36	---	---	0.0000-0.0015	---	---	---	---	---			
2421:												
Orwash-----	0-3	3-7	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	5	4	86
	3-18	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
	18-60	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
Wilst-----	0-4	8-15	1.45-1.60	2-6	0.04-0.06	0.0-2.9	0.5-1.0	.10	.37	2	5	56
	4-10	8-15	1.50-1.70	0.6-2	0.06-0.08	0.0-2.9	0.0-0.5	.17	.32			
	10-33	8-15	1.50-1.70	0.6-2	0.04-0.06	0.0-2.9	0.0-0.5	.10	.37			
	33-43	---	---	0.0000-0.0015	---	---	---	---	---			
Agon-----	0-3	5-12	1.50-1.65	6-20	0.03-0.05	0.0-2.9	0.5-1.0	.02	.24	2	4	86
	3-32	3-5	1.50-1.65	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.10	.20			
	32-33	---	---	0.0000-0.0015	---	---	---	---	---			
	33-37	---	---	0.0000-0.0015	---	---	---	---	---			
2422:												
Orwash-----	0-3	3-7	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	5	4	86
	3-18	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
	18-60	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
Louderback-----	0-3	5-10	1.50-1.65	6-20	0.06-0.08	0.0-2.9	0.5-1.0	.15	.17	5	2	134
	3-40	2-8	1.50-1.65	6-20	0.05-0.07	0.0-2.9	0.5-1.0	.20	.20			
	40-60	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
Typic Halaquepts----	---	---	---	---	---	---	---	---	---	-	---	---
2423:												
Orwash-----	0-3	3-7	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	5	4	86
	3-18	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
	18-60	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
Wanomie-----	0-2	5-10	1.45-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.37	3	5	56
	2-30	5-18	1.50-1.70	0.6-2	0.11-0.13	0.0-2.9	0.0-0.5	.32	.32			
	30-31	---	---	0.0015-0.06	---	---	---	---	---			
	31-60	5-10	1.55-1.75	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.28	.32			
2425:												
Orwash-----	0-3	3-7	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	5	4	86
	3-18	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
	18-60	2-6	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.10	.20			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2431:												
Zibate-----	0-6	10-18	1.40-1.55	0.6-2	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	6-19	18-35	1.40-1.60	0.2-0.6	0.13-0.17	3.0-5.9	0.0-0.5	.10	.43			
	19-23	---	---	0.0000-0.0015	---	---	---	---	---			
Dedas-----	0-3	5-8	1.40-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.6	.10	.37	1	5	56
	3-15	10-18	1.40-1.60	2-6	0.09-0.13	0.0-2.9	0.0-0.6	.10	.37			
	15-17	---	---	0.0000-0.0015	---	---	---	---	---			
	17-27	---	---	0.0000-0.0015	---	---	---	---	---			
Zyplar-----	0-7	8-18	1.40-1.55	2-6	0.07-0.09	0.0-2.9	0.5-1.0	.17	.32	1	5	56
	7-12	25-35	1.40-1.55	0.6-2	0.12-0.14	3.0-5.9	0.0-0.5	.24	.43			
	12-16	---	---	0.0000-0.0015	---	---	---	---	---			
2432:												
Zibate-----	0-6	10-18	1.40-1.55	0.6-2	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	6-19	18-35	1.40-1.60	0.2-0.6	0.13-0.17	3.0-5.9	0.0-0.5	.10	.43			
	19-23	---	---	0.0000-0.0015	---	---	---	---	---			
2434:												
Zibate-----	0-6	10-18	1.40-1.55	0.6-2	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	6-19	18-35	1.40-1.60	0.2-0.6	0.13-0.17	3.0-5.9	0.0-0.5	.10	.43			
	19-23	---	---	0.0000-0.0015	---	---	---	---	---			
Sed-----	0-7	8-16	1.35-1.50	0.6-2	0.08-0.11	0.0-2.9	1.0-2.0	.10	.32	2	7	38
	7-20	20-30	1.30-1.50	0.2-0.6	0.08-0.11	3.0-5.9	0.5-1.0	.05	.43			
	20-24	20-30	1.30-1.50	0.2-0.6	0.04-0.06	3.0-5.9	0.0-0.5	.05	.43			
	24-34	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---
2441:												
Lewdlac-----	0-3	3-8	1.50-1.65	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.15	.28	2	3	86
	3-16	5-10	1.45-1.60	2-6	0.14-0.17	0.0-2.9	0.0-0.5	.37	.37			
	16-21	---	---	0.06-0.2	---	---	---	---	---			
	21-60	20-35	1.50-1.65	0.06-0.2	0.06-0.10	3.0-5.9	0.0-0.5	.17	.37			
Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			
2451:												
Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			
Sanwell-----	0-9	5-10	1.40-1.60	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.24	.37	5	4	86
	9-16	5-10	1.30-1.50	2-6	0.08-0.12	0.0-2.9	0.0-0.5	.17	.32			
	16-31	5-10	1.50-1.70	0.6-2	0.05-0.09	0.0-2.9	0.0-0.5	.15	.28			
	31-60	5-10	1.50-1.70	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.15	.20			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
2461:												
Nowoy-----	0-3	3-8	1.50-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.10	.28	3	3	86
	3-20	5-10	1.40-1.60	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.10	.32			
	20-60	27-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.37	.37			
Skelon-----	0-4	5-10	1.40-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	2	4	86
	4-28	3-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32			
	28-44	---	---	0.0000-0.0015	---	---	---	---	---			
	44-52	5-10	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	52-60	0-5	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2471: Lewdlac-----	0-3	3-8	1.50-1.65	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.15	.28	2	3	86
	3-16	5-10	1.45-1.60	2-6	0.14-0.17	0.0-2.9	0.0-0.5	.37	.37			
	16-21	---	---	0.06-0.2	---	---	---	---	---			
	21-60	20-35	1.50-1.65	0.06-0.2	0.06-0.10	3.0-5.9	0.0-0.5	.17	.37			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
2481: Bacho-----	0-3	5-18	1.40-1.55	2-6	0.03-0.06	0.0-2.9	0.5-1.0	.05	.32	1	5	56
	3-11	35-50	1.25-1.40	0.0015-0.06	0.15-0.19	3.0-5.9	0.0-0.5	.10	.32			
	11-36	---	---	0.0000-0.0015	---	---	---	---	---			
Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	---	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
2482: Bacho-----	0-3	5-18	1.40-1.55	2-6	0.03-0.06	0.0-2.9	0.5-1.0	.05	.32	1	5	56
	3-11	35-50	1.25-1.40	0.0015-0.06	0.15-0.19	3.0-5.9	0.0-0.5	.10	.32			
	11-36	---	---	0.0000-0.0015	---	---	---	---	---			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
2491: Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Blacktop-----	0-7	10-18	1.30-1.50	0.6-2	0.04-0.08	0.0-2.9	0.0-0.5	.20	.32	1	5	56
	7-17	---	---	0.0000-0.0015	---	---	---	---	---			
Tokoper-----	0-3	8-15	1.40-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.24	.32	1	5	56
	3-9	20-30	1.30-1.50	0.2-0.6	0.15-0.18	3.0-5.9	0.0-0.5	.15	.49			
	9-14	15-25	1.35-1.55	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.05	.37			
	14-15	---	---	0.0000-0.0015	---	---	---	---	---			
	15-25	---	---	0.0000-0.0015	---	---	---	---	---			
2492: Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Silverbow-----	0-2	5-15	1.25-1.45	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.20	.32	1	4	86
	2-10	20-35	1.25-1.45	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.5	.05	.37			
	10-18	---	---	0.0000-0.0015	---	---	---	---	---			
	18-40	---	---	0.0015-0.06	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	---	---	---
2493: Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Tognoni-----	0-4	10-18	1.30-1.50	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.10	.32	1	5	56
	4-14	35-45	1.20-1.40	0.06-0.2	0.07-0.12	3.0-5.9	0.0-0.5	.10	.43			
	14-24	---	---	0.0000-0.0015	---	---	---	---	---			
Stonell-----	0-3	5-15	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-1.0	.20	.37	5	4	86
	3-8	20-30	1.40-1.55	0.2-0.6	0.05-0.10	0.0-2.9	0.0-0.5	.10	.32			
	8-60	5-10	1.50-1.70	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.17			
2494: Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Stewval-----	0-1	12-18	1.35-1.50	2-6	0.07-0.09	0.0-2.9	0.5-2.0	.15	.43	1	5	56
	1-7	24-30	1.30-1.45	0.6-2	0.04-0.09	0.0-2.9	0.5-1.0	.10	.43			
	7-11	---	---	0.0000-0.0015	---	---	---	---	---			
Vindicator-----	0-2	10-18	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	2-7	20-30	1.30-1.50	0.6-2	0.09-0.14	3.0-5.9	0.0-0.5	.05	.43			
	7-11	---	---	0.0015-0.06	---	---	---	---	---			
2495:												
Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-16	---	---	0.0000-0.0015	---	---	---	---	---			
2496:												
Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Pintwater-----	0-4	10-18	1.35-1.55	2-6	0.08-0.11	0.0-2.9	0.0-0.5	.10	.32	1	5	56
	4-11	10-18	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.05	.32			
	11-15	---	---	0.0000-0.0015	---	---	---	---	---			
Upspring-----	0-2	10-18	1.25-1.45	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	2-12	10-18	1.30-1.50	2-6	0.04-0.09	0.0-2.9	0.0-0.5	.17	.24			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			
2500:												
Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
Greyeagle-----	0-3	10-18	1.45-1.65	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	3-6	10-18	1.50-1.70	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.24			
	6-8	10-18	1.50-1.70	2-6	0.04-0.07	0.0-2.9	0.0-0.5	.15	.24			
	8-24	0-0	---	0.0000-0.0015	---	---	---	---	---			
	24-60	5-10	1.65-1.80	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.17	.20			
2501:												
Wanomie-----	0-2	5-10	1.45-1.60	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.28	.32	3	3	86
	2-30	5-18	1.50-1.70	0.6-2	0.11-0.13	0.0-2.9	0.0-0.5	.32	.32			
	30-31	---	---	0.0015-0.06	---	---	---	---	---			
	31-60	5-10	1.55-1.75	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.28	.32			
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28	4	4	86
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			
Playas-----	---	---	---	---	---	---	---	---	---	---	---	---
2510:												
Fuegosta-----	0-4	5-15	1.40-1.60	2-6	0.10-0.12	0.0-2.9	0.0-0.8	.15	.24	1	4	86
	4-14	35-50	1.25-1.45	0.06-0.2	0.12-0.14	6.0-8.9	0.0-0.5	.24	.43			
	14-18	5-15	1.55-1.75	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32			
	18-26	---	---	0.0000-0.0015	---	---	---	---	---			
	26-60	---	---	0.0015-0.06	---	---	---	---	---			
Tomel-----	0-3	10-18	1.40-1.55	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.10	.37	1	5	56
	3-19	20-30	1.20-1.40	0.2-0.6	0.07-0.13	0.0-2.9	0.0-0.5	.15	.43			
	19-26	---	---	0.0000-0.0015	---	---	---	---	---			
	26-60	2-8	1.50-1.70	20-101	0.03-0.05	0.0-2.9	0.0-0.5	.05	.28			
Izo-----	0-9	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	9-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2511: Fuegosta-----	0-4	5-15	1.40-1.60	2-6	0.10-0.12	0.0-2.9	0.0-0.8	.15	.24	1	4	86
	4-14	35-50	1.25-1.45	0.06-0.2	0.12-0.14	6.0-8.9	0.0-0.5	.24	.43			
	14-18	5-15	1.55-1.75	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32			
	18-26	---	---	0.0000-0.0015	---	---	---	---	---			
	26-60	---	---	0.0015-0.06	---	---	---	---	---			
Wardenot-----	0-5	5-18	1.40-1.55	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.10	.32	5	4	86
	5-60	5-10	1.35-1.55	6-20	0.04-0.08	0.0-2.9	0.0-0.5	.05	.28			
Izo-----	0-8	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	8-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2520: Vigus-----	0-7	5-15	1.35-1.55	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.10	.17	5	4	86
	7-13	18-27	1.30-1.50	0.2-0.6	0.15-0.17	3.0-5.9	0.0-0.5	.15	.32			
	13-60	10-15	1.35-1.55	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.05	.24			
Fuegosta-----	0-4	5-15	1.40-1.60	2-6	0.10-0.12	0.0-2.9	0.0-0.8	.15	.24	1	4	86
	4-14	35-50	1.25-1.45	0.06-0.2	0.12-0.14	6.0-8.9	0.0-0.5	.24	.43			
	14-18	5-15	1.55-1.75	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32			
	18-26	---	---	0.0000-0.0015	---	---	---	---	---			
	26-60	---	---	0.0015-0.06	---	---	---	---	---			
Izo-----	0-8	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	8-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2521: Vigus-----	0-7	5-15	1.35-1.55	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.10	.17	5	4	86
	7-13	18-27	1.30-1.50	0.2-0.6	0.15-0.17	3.0-5.9	0.0-0.5	.15	.32			
	13-60	10-15	1.35-1.55	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.05	.24			
Wardenot-----	0-5	5-18	1.40-1.55	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.10	.32	5	4	86
	5-60	5-10	1.35-1.55	6-20	0.04-0.08	0.0-2.9	0.0-0.5	.05	.28			
Fuegosta-----	0-4	5-15	1.40-1.60	2-6	0.10-0.12	0.0-2.9	0.0-0.8	.15	.24	1	4	86
	4-14	35-50	1.25-1.45	0.06-0.2	0.12-0.14	6.0-8.9	0.0-0.5	.24	.43			
	14-18	5-15	1.55-1.75	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32			
	18-26	---	---	0.0000-0.0015	---	---	---	---	---			
	26-60	---	---	0.0015-0.06	---	---	---	---	---			
2531: Laxal-----	0-4	8-15	1.35-1.50	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.28	.32	5	4	86
	4-60	5-10	1.40-1.55	2-6	0.04-0.08	0.0-2.9	0.0-0.5	.10	.43			
Stonell-----	0-3	5-15	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-1.0	.20	.37	5	4	86
	3-8	20-30	1.40-1.55	0.2-0.6	0.05-0.10	0.0-2.9	0.0-0.5	.10	.32			
	8-60	5-10	1.50-1.70	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.17			
Unsel-----	0-7	15-20	1.35-1.55	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.20	.37	3	4	86
	7-11	27-35	1.25-1.45	0.2-0.6	0.10-0.17	3.0-5.9	0.0-0.5	.20	.37			
	11-20	10-25	1.35-1.55	0.6-2	0.07-0.12	0.0-2.9	0.0-0.5	.20	.37			
	20-60	2-8	1.50-1.70	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.24			
2532: Laxal-----	0-4	8-15	1.35-1.50	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.28	.32	5	4	86
	4-60	5-10	1.40-1.55	2-6	0.04-0.08	0.0-2.9	0.0-0.5	.10	.43			
Fang-----	0-3	5-18	1.40-1.60	2-6	0.12-0.14	0.0-2.9	0.0-0.5	.32	.37	4	3	86
	3-42	12-18	1.40-1.60	0.6-2	0.12-0.14	0.0-2.9	0.0-0.5	.37	.43			
	42-64	5-10	1.50-1.70	0.6-2	0.10-0.12	0.0-2.9	0.0-0.5	.15	.24			
2540: Lidan-----	0-5	5-15	1.40-1.55	2-6	0.06-0.10	0.0-2.9	0.5-1.0	.15	.28	2	4	86
	5-14	40-55	1.25-1.40	0.06-0.2	0.06-0.09	3.0-5.9	0.0-0.5	.17	.43			
	14-30	30-40	1.30-1.50	0.06-0.2	0.04-0.06	3.0-5.9	0.0-0.5	.15	.37			
	30-36	---	---	0.0000-0.0015	---	---	---	---	---			
	36-60	---	---	0.0015-0.06	---	---	---	---	---			
Izo-----	0-8	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	8-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2550:												
Stonewall-----	0-4	5-15	1.45-1.60	2-6	0.09-0.11	0.0-2.9	0.5-1.0	.20	.37	3	4	86
	4-16	35-60	1.25-1.45	0.06-0.2	0.10-0.12	3.0-5.9	0.0-0.5	.15	.43			
	16-60	5-15	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.28			
Izo-----	0-3	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	3-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
Lidan-----	0-5	5-15	1.40-1.55	2-6	0.06-0.10	0.0-2.9	0.5-1.0	.15	.28	2	4	86
	5-14	40-55	1.25-1.40	0.06-0.2	0.06-0.09	3.0-5.9	0.0-0.5	.17	.43			
	14-30	30-40	1.30-1.50	0.06-0.2	0.04-0.06	3.0-5.9	0.0-0.5	.15	.37			
	30-36	---	---	0.0000-0.0015	---	---	---	---	---			
	36-60	---	---	0.0015-0.06	---	---	---	---	---			
2570:												
Stargo-----	0-4	5-10	1.40-1.55	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.24	.28	3	3	86
	4-10	27-35	1.30-1.50	0.2-0.6	0.18-0.20	3.0-5.9	0.0-0.5	.37	.43			
	10-60	2-8	1.50-1.65	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.17	.24			
Playas-----	0-6	27-40	1.50-1.70	0.0015-0.06	0.02-0.04	6.0-8.9	0.0-0.1	.37	.37	-	4L	86
	6-60	35-70	1.60-1.80	0.0015-0.06	0.02-0.04	6.0-8.9	0.0-0.1	.37	.37			
2580:												
Wardenot-----	0-5	3-8	1.50-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.02	.24	5	4	86
	5-60	5-10	1.35-1.55	6-20	0.04-0.08	0.0-2.9	0.0-0.5	.05	.28			
Izo-----	0-8	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	8-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2601:												
Cobatus-----	0-2	15-25	1.40-1.60	0.6-2	0.15-0.17	3.0-5.9	0.0-0.5	.32	.32	5	4L	86
	2-14	15-25	1.35-1.55	0.6-2	0.15-0.17	3.0-5.9	0.0-0.5	.32	.32			
	14-60	20-30	1.50-1.70	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.32	.32			
Kawich-----	0-2	0-5	1.50-1.65	20-101	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	5	1	250
	2-60	0-5	1.50-1.65	20-101	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
2611:												
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.10	.37	4	5	56
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			
Playas-----	---	---	---	---	---	---	---	---	---	-	---	---
2630:												
Wechech-----	0-2	10-20	1.45-1.55	0.6-2	0.15-0.18	0.0-2.9	0.0-0.5	.15	.28	1	5	56
	2-7	10-20	1.45-1.55	0.6-2	0.05-0.08	0.0-2.9	0.0-0.5	.10	.37			
	7-60	---	---	0.0000-0.0015	---	---	---	---	---			
Commski-----	0-5	10-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32	5	5	56
	5-14	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
	14-60	5-15	1.50-1.70	0.6-2	0.03-0.05	0.0-2.9	0.0-0.5	.10	.28			
2640:												
Advokay-----	0-3	10-18	1.35-1.55	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.15	.28	1	4	86
	3-7	20-35	1.25-1.45	0.2-0.6	0.11-0.14	3.0-5.9	0.0-0.5	.10	.20			
	7-11	---	---	0.0015-0.06	---	---	---	---	---			
Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Pintwater-----	0-4	10-18	1.35-1.55	2-6	0.08-0.11	0.0-2.9	0.0-0.5	.10	.32	1	5	56
	4-11	10-18	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.05	.32			
	11-15	---	---	0.0000-0.0015	---	---	---	---	---			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2641:												
Advokay-----	0-3	10-18	1.35-1.55	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.15	.28	1	4	86
	3-7	20-35	1.25-1.45	0.2-0.6	0.11-0.14	3.0-5.9	0.0-0.5	.10	.20			
	7-11	---	---	0.0015-0.06	---	---	---	---	---			
Ardivey-----	0-4	12-18	1.35-1.55	2-6	0.05-0.08	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	4-14	18-35	1.30-1.45	0.2-0.6	0.08-0.13	0.0-2.9	0.0-0.5	.10	.43			
	14-60	6-12	1.45-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.24			
Leo-----	0-4	5-15	1.40-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.10	.20	5	4	86
	4-60	0-5	1.50-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.02	.20			
2642:												
Advokay-----	0-3	10-18	1.35-1.55	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.15	.28	1	4	86
	3-7	20-35	1.25-1.45	0.2-0.6	0.11-0.14	3.0-5.9	0.0-0.5	.10	.20			
	7-11	---	---	0.0015-0.06	---	---	---	---	---			
Blacktop-----	0-7	10-18	1.30-1.50	0.6-2	0.04-0.08	0.0-2.9	0.0-0.5	.20	.32	1	5	56
	7-17	---	---	0.0000-0.0015	---	---	---	---	---			
2650:												
Luning-----	0-3	3-10	1.50-1.65	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.24	.24	5	2	134
	3-60	3-10	1.50-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.15	.24			
Wardenot-----	0-5	5-18	1.40-1.55	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.10	.32	5	4	86
	5-60	5-10	1.35-1.55	6-20	0.04-0.08	0.0-2.9	0.0-0.5	.05	.28			
Izo-----	0-8	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	8-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2660:												
Stonell-----	0-3	5-15	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-1.0	.20	.37	5	4	86
	3-8	20-30	1.40-1.55	0.2-0.6	0.05-0.10	0.0-2.9	0.0-0.5	.10	.32			
	8-60	5-10	1.50-1.70	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.17			
Wardenot-----	0-5	8-12	1.40-1.55	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	5-60	5-10	1.35-1.55	6-20	0.04-0.08	0.0-2.9	0.0-0.5	.05	.28			
Izo-----	0-8	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	8-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2670:												
Ardivey-----	0-4	12-18	1.35-1.55	2-6	0.05-0.08	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	4-14	18-35	1.30-1.45	0.2-0.6	0.08-0.13	0.0-2.9	0.0-0.5	.10	.43			
	14-60	6-12	1.45-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.24			
Izo-----	0-8	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	8-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2671:												
Ardivey-----	0-4	12-18	1.35-1.55	2-6	0.05-0.08	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	4-14	18-35	1.30-1.45	0.2-0.6	0.08-0.13	0.0-2.9	0.0-0.5	.10	.43			
	14-60	6-12	1.45-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.24			
Izo-----	0-8	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	8-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
Stonell-----	0-3	5-15	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-1.0	.20	.37	5	4	86
	3-8	20-30	1.40-1.55	0.2-0.6	0.05-0.10	0.0-2.9	0.0-0.5	.10	.32			
	8-60	5-10	1.50-1.70	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.17			
2680:												
Espint-----	0-1	10-18	1.30-1.50	2-6	0.08-0.10	0.0-2.9	0.7-2.0	.05	.32	2	5	56
	1-7	35-50	1.20-1.40	0.06-0.2	0.12-0.18	6.0-8.9	0.5-1.0	.17	.37			
	7-17	---	---	0.0015-0.06	---	---	---	---	---			
Vindicator-----	0-2	10-18	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	2-7	20-30	1.30-1.50	0.6-2	0.09-0.14	3.0-5.9	0.0-0.5	.05	.43			
	7-17	---	---	0.0015-0.06	---	---	---	---	---			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Espint-----	0-1	10-18	1.30-1.50	2-6	0.08-0.10	0.0-2.9	0.7-2.0	.05	.32	2	5	56
	1-7	35-50	1.20-1.40	0.06-0.2	0.12-0.18	6.0-8.9	0.5-1.0	.17	.37			
	7-17	---	---	0.0015-0.06	---	---	---	---	---			
2681: Espint-----	0-1	10-18	1.30-1.50	2-6	0.08-0.10	0.0-2.9	0.7-2.0	.05	.32	2	5	56
	1-7	35-50	1.20-1.40	0.06-0.2	0.12-0.18	6.0-8.9	0.5-1.0	.17	.37			
	7-17	---	---	0.0015-0.06	---	---	---	---	---			
Stewval-----	0-1	12-18	1.35-1.50	2-6	0.07-0.09	0.0-2.9	0.5-2.0	.15	.43	1	5	56
	1-7	24-30	1.30-1.45	0.6-2	0.04-0.09	0.0-2.9	0.5-1.0	.10	.43			
	7-11	---	---	0.0000-0.0015	---	---	---	---	---			
Vindicator-----	0-2	10-18	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	2-7	20-30	1.30-1.50	0.6-2	0.09-0.14	3.0-5.9	0.0-0.5	.05	.43			
	7-17	---	---	0.0015-0.06	---	---	---	---	---			
2682: Espint-----	0-1	10-18	1.30-1.50	2-6	0.08-0.10	0.0-2.9	0.7-2.0	.05	.32	2	5	56
	1-7	35-50	1.20-1.40	0.06-0.2	0.12-0.18	6.0-8.9	0.5-1.0	.17	.37			
	7-17	---	---	0.0015-0.06	---	---	---	---	---			
Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-15	---	---	0.0000-0.0015	---	---	---	---	---			
Stewval-----	0-1	12-18	1.35-1.50	2-6	0.07-0.09	0.0-2.9	0.5-2.0	.15	.43	1	5	56
	1-7	24-30	1.30-1.45	0.6-2	0.04-0.09	0.0-2.9	0.5-1.0	.10	.43			
	7-11	---	---	0.0000-0.0015	---	---	---	---	---			
2690: Leo-----	0-4	5-15	1.40-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.10	.20	5	4	86
	4-60	0-5	1.50-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.02	.20			
Izo-----	0-8	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	8-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2701: Cobatus-----	0-2	15-25	1.40-1.60	0.6-2	0.15-0.17	3.0-5.9	0.0-0.5	.32	.32	5	4L	86
	2-14	15-25	1.35-1.55	0.6-2	0.15-0.17	3.0-5.9	0.0-0.5	.32	.32			
	14-60	20-30	1.50-1.70	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.32	.32			
2710: Papoose-----	0-6	2-6	1.50-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.17	.32	2	3	86
	6-12	20-27	1.35-1.55	0.2-0.6	0.14-0.16	3.0-5.9	0.0-0.5	.24	.37			
	12-25	18-25	1.30-1.50	0.6-2	0.10-0.12	0.0-2.9	0.0-0.5	.17	.49			
	25-60	4-15	1.50-1.65	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.15	.24			
Vindicator-----	0-2	10-18	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	2-7	20-30	1.30-1.50	0.6-2	0.09-0.14	3.0-5.9	0.0-0.5	.05	.43			
	7-17	---	---	0.0015-0.06	---	---	---	---	---			
Espint-----	0-1	10-18	1.30-1.50	2-6	0.08-0.10	0.0-2.9	0.7-2.0	.05	.32	2	5	56
	1-7	35-50	1.20-1.40	0.06-0.2	0.12-0.18	6.0-8.9	0.5-1.0	.17	.37			
	7-17	---	---	0.0015-0.06	---	---	---	---	---			
2720: Unsel-----	0-7	15-20	1.35-1.55	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.20	.37	3	4	86
	7-11	27-35	1.25-1.45	0.2-0.6	0.10-0.17	3.0-5.9	0.0-0.5	.20	.37			
	11-20	10-25	1.35-1.55	0.6-2	0.07-0.12	0.0-2.9	0.0-0.5	.20	.37			
	20-60	2-8	1.50-1.70	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.24			
Stonell-----	0-3	5-15	1.35-1.50	2-6	0.06-0.09	0.0-2.9	0.0-1.0	.20	.37	5	4	86
	3-8	20-30	1.40-1.55	0.2-0.6	0.05-0.10	0.0-2.9	0.0-0.5	.10	.32			
	8-60	5-10	1.50-1.70	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.17			
Veet-----	0-5	8-15	1.35-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	3	5	56
	5-20	10-18	1.35-1.55	0.6-2	0.06-0.08	0.0-2.9	0.0-0.5	.10	.37			
	20-60	5-10	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.10	.32			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2730: Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-15	---	---	0.0000-0.0015	---	---	---	---	---			
Blacktop-----	0-7	10-18	1.30-1.50	0.6-2	0.04-0.08	0.0-2.9	0.0-0.5	.20	.32	1	5	56
	7-17	---	---	0.0000-0.0015	---	---	---	---	---			
Espint-----	0-1	10-18	1.30-1.50	2-6	0.08-0.10	0.0-2.9	0.7-2.0	.05	.32	2	5	56
	1-7	35-50	1.20-1.40	0.06-0.2	0.12-0.18	6.0-8.9	0.5-1.0	.17	.37			
	7-17	---	---	0.0015-0.06	---	---	---	---	---			
2731: Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-15	---	---	0.0000-0.0015	---	---	---	---	---			
Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Vindicator-----	0-2	10-18	1.45-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	2-7	20-30	1.30-1.50	0.6-2	0.09-0.14	3.0-5.9	0.0-0.5	.05	.43			
	7-11	---	---	0.0015-0.06	---	---	---	---	---			
2732: Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-15	---	---	0.0000-0.0015	---	---	---	---	---			
Tognoni-----	0-4	5-15	1.30-1.50	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.37	1	4	86
	4-14	35-45	1.20-1.40	0.06-0.2	0.07-0.12	3.0-5.9	0.0-0.5	.10	.43			
	14-24	---	---	0.0000-0.0015	---	---	---	---	---			
Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
2734: Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-15	---	---	0.0000-0.0015	---	---	---	---	---			
Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
2735: Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-15	---	---	0.0000-0.0015	---	---	---	---	---			
Wahguyhe-----	0-2	5-15	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.32	1	5	56
	2-16	5-15	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.37			
	16-20	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---
2736: Brier-----	0-4	15-27	1.15-1.35	0.6-2	0.08-0.10	0.0-2.9	2.0-5.0	.15	.43	1	7	38
	4-15	18-35	1.30-1.50	0.2-0.6	0.08-0.10	3.0-5.9	1.0-3.0	.10	.32			
	15-19	---	---	0.0000-0.0015	---	---	---	---	---			
Gabbvally-----	0-4	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	4-12	18-27	1.30-1.50	0.6-2	0.11-0.13	0.0-2.9	0.5-2.0	.15	.32			
	12-15	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2740:												
Tognoni-----	0-4	5-15	1.30-1.50	2-6	0.07-0.10	0.0-2.9	0.0-0.5	.20	.37	1	4	86
	4-14	35-45	1.20-1.40	0.06-0.2	0.07-0.12	3.0-5.9	0.0-0.5	.10	.43			
	14-24	---	---	0.0000-0.0015	---	---	---	---	---			
Blacktop-----	0-7	10-18	1.30-1.50	2-6	0.06-0.08	0.0-2.9	0.8-2.0	.10	.32	1	5	56
	7-17	---	---	0.0000-0.0015	---	---	---	---	---			
2741:												
Blacktop-----	0-7	10-18	1.30-1.50	0.6-2	0.04-0.08	0.0-2.9	0.0-0.5	.20	.32	1	5	56
	7-17	---	---	0.0000-0.0015	---	---	---	---	---			
Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Tognoni-----	0-4	10-18	1.30-1.50	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.10	.32	1	5	56
	4-14	35-45	1.20-1.40	0.06-0.2	0.07-0.12	3.0-5.9	0.0-0.5	.10	.43			
	14-24	---	---	0.0000-0.0015	---	---	---	---	---			
2750:												
Silverbow-----	0-2	5-15	1.25-1.45	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.20	.32	1	4	86
	2-10	20-35	1.25-1.45	0.2-0.6	0.08-0.12	0.0-2.9	0.0-0.5	.05	.37			
	10-18	---	---	0.0000-0.0015	---	---	---	---	---			
	18-40	---	---	0.0015-0.06	---	---	---	---	---			
Wardenot-----	0-5	3-8	1.50-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.02	.24	5	4	86
	5-60	5-10	1.35-1.55	6-20	0.04-0.08	0.0-2.9	0.0-0.5	.05	.28			
Izo-----	0-8	0-5	1.50-1.70	20-101	0.02-0.04	0.0-2.9	0.0-0.5	.05	.20	5	3	86
	8-60	0-5	1.40-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.10			
2760:												
Downeyville-----	0-4	8-18	1.35-1.55	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	4-9	18-27	1.25-1.45	0.6-2	0.07-0.09	0.0-2.9	0.0-0.5	.10	.43			
	9-13	---	---	0.0000-0.0015	---	---	---	---	---			
Unsel-----	0-7	15-20	1.35-1.55	2-6	0.10-0.13	0.0-2.9	0.0-0.5	.20	.37	3	4	86
	7-11	27-35	1.25-1.45	0.2-0.6	0.10-0.17	3.0-5.9	0.0-0.5	.20	.37			
	11-20	10-25	1.35-1.55	0.6-2	0.07-0.12	0.0-2.9	0.0-0.5	.20	.37			
	20-60	2-8	1.50-1.70	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.24			
Tokoper-----	0-3	8-15	1.40-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.24	.32	1	5	56
	3-9	20-30	1.30-1.50	0.2-0.6	0.15-0.18	3.0-5.9	0.0-0.5	.15	.49			
	9-14	15-25	1.35-1.55	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.05	.37			
	14-15	---	---	0.0000-0.0015	---	---	---	---	---			
	15-25	---	---	0.0000-0.0015	---	---	---	---	---			
2770:												
Bullfor-----	0-1	2-5	1.50-1.70	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.32	.37	2	1	250
	1-24	2-5	1.50-1.70	6-20	0.06-0.08	0.0-2.9	0.0-0.5	.17	.20			
	24-25	---	---	0.06-0.2	---	---	---	---	---			
	25-60	5-10	1.55-1.75	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.43			
Panor-----	0-1	10-20	1.35-1.55	0.6-2	0.11-0.13	0.0-2.9	0.0-0.5	.24	.24	5	3	86
	1-5	10-20	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.0-0.5	.49	.49			
	5-23	27-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.24	.24			
	23-60	27-35	1.25-1.45	0.2-0.6	0.14-0.16	3.0-5.9	0.0-0.5	.15	.43			
Bluepoint-----	0-9	2-6	1.45-1.65	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17	5	2	134
	9-17	2-6	1.50-1.65	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.10	.28			
	17-41	2-6	1.50-1.65	6-20	0.05-0.09	0.0-2.9	0.0-0.5	.17	.17			
	41-60	2-10	1.50-1.65	2-6	0.05-0.14	0.0-2.9	0.0-0.5	.24	.24			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2781:												
Haymont-----	0-6	5-15	1.35-1.55	0.6-2	0.15-0.17	0.0-2.9	0.0-0.5	.43	.43	5	3	86
	6-40	5-18	1.35-1.55	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.37	.37			
	40-60	5-20	1.35-1.55	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.32	.32			
Bluepoint-----	0-9	2-6	1.45-1.65	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17	5	2	134
	9-17	2-6	1.50-1.65	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.10	.28			
	17-41	2-6	1.50-1.65	6-20	0.05-0.09	0.0-2.9	0.0-0.5	.17	.17			
	41-60	2-10	1.50-1.65	2-6	0.05-0.14	0.0-2.9	0.0-0.5	.24	.24			
Panor-----	0-1	10-20	1.35-1.55	0.6-2	0.11-0.13	0.0-2.9	0.0-0.5	.24	.24	5	3	86
	1-5	10-20	1.30-1.50	0.6-2	0.19-0.21	0.0-2.9	0.0-0.5	.49	.49			
	5-23	27-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.24	.24			
	23-60	27-35	1.25-1.45	0.2-0.6	0.14-0.16	3.0-5.9	0.0-0.5	.15	.43			
Playas-----	---	---	---	---	---	---	---	---	---	-	---	---
2810:												
Ashmed-----	0-4	5-15	1.35-1.55	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.20	.32	5	4	86
	4-7	10-15	1.30-1.50	0.2-0.6	0.16-0.19	0.0-2.9	0.0-0.5	.28	.43			
	7-24	25-35	1.25-1.40	0.2-0.6	0.10-0.12	0.0-2.9	0.0-0.5	.05	.37			
	24-32	5-15	1.45-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	32-60	5-15	1.55-1.75	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.05	.24			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Arizo-----	0-8	5-12	1.40-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32	5	5	56
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2820:												
Strozi-----	0-5	5-15	1.35-1.55	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.15	.28	3	4	86
	5-13	27-35	1.35-1.50	0.2-0.6	0.17-0.19	3.0-5.9	0.0-0.5	.32	.37			
	13-32	5-10	1.55-1.75	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32			
	32-33	---	---	0.06-0.2	---	---	---	---	---			
	33-60	5-10	1.55-1.75	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.10	.37			
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28	4	4	86
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			
2840:												
Armpup-----	0-3	5-10	1.50-1.65	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.32	.37	2	1	250
	3-18	35-45	1.25-1.45	0.06-0.2	0.14-0.16	6.0-8.9	0.0-0.5	.20	.32			
	18-46	35-45	1.25-1.45	0.06-0.2	0.15-0.17	3.0-5.9	0.0-0.5	.05	.37			
	46-55	5-10	1.40-1.60	6-20	0.06-0.11	0.0-2.9	0.0-0.5	.10	.37			
	55-59	---	---	0.0015-0.06	---	---	---	---	---			
Strozi-----	0-5	5-15	1.35-1.55	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.24	.28	3	3	86
	5-13	27-35	1.35-1.50	0.2-0.6	0.17-0.19	3.0-5.9	0.0-0.5	.32	.37			
	13-32	5-10	1.55-1.75	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.15	.32			
	32-33	---	---	0.06-0.2	---	---	---	---	---			
	33-60	5-10	1.55-1.75	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.10	.37			
2850:												
Scottcas-----	0-2	5-15	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.17	.32	2	5	56
	2-7	20-30	1.25-1.45	0.2-0.6	0.11-0.13	3.0-5.9	0.0-0.5	.10	.32			
	7-15	5-15	1.45-1.65	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.05	.32			
	15-21	4-10	1.45-1.65	6-20	0.02-0.05	0.0-2.9	0.0-0.5	.02	.10			
	21-60	4-10	1.45-1.65	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.37			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
2860:												
Sezna-----	0-3	5-15	1.45-1.60	2-6	0.07-0.09	0.0-2.9	0.0-0.5	.20	.43	1	4	86
	3-18	25-35	1.35-1.55	0.2-0.6	0.08-0.10	3.0-5.9	0.0-0.5	.15	.37			
	18-60	---	---	0.0000-0.0015	---	---	---	---	---			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2870: Kanackey-----	0-3	15-20	1.35-1.55	0.6-2	0.12-0.14	0.0-2.9	0.0-0.5	.10	.37	1	6	48
	3-7	40-60	1.25-1.40	0.06-0.2	0.08-0.10	3.0-5.9	0.0-0.5	.17	.37			
	7-14	40-60	1.25-1.40	0.06-0.2	0.07-0.09	3.0-5.9	0.0-0.5	.15	.37			
	14-24	---	---	0.0000-0.0015	---	---	---	---	---			
2880: Bacho-----	0-3	5-18	1.40-1.55	2-6	0.03-0.06	0.0-2.9	0.5-1.0	.05	.32	1	5	56
	3-11	35-50	1.25-1.40	0.0015-0.06	0.15-0.19	3.0-5.9	0.0-0.5	.10	.32			
	11-36	---	---	0.0000-0.0015	---	---	---	---	---			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
Arizo-----	0-8	2-8	1.45-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.05	.24	5	4	86
	8-60	0-5	1.45-1.65	20-101	0.04-0.06	0.0-2.9	0.0-0.5	.10	.32			
2890: Nopah-----	0-6	10-20	1.40-1.60	0.2-0.6	0.16-0.18	0.0-2.9	0.0-0.5	.49	.49	5	4L	86
	6-60	20-35	1.30-1.50	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.28	.28			
Woda-----	0-1	5-10	1.35-1.55	2-6	0.09-0.11	0.0-2.9	0.0-0.5	.15	.28	1	4	86
	1-10	5-10	1.35-1.55	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.37	.43			
	10-18	20-30	1.25-1.45	0.2-0.6	0.16-0.18	0.0-2.9	0.0-0.5	.24	.43			
	18-60	---	---	0.0000-0.0015	---	---	---	---	---			
Gullied Land-----	0-60	---	---	0.0015-6	0.00-0.00	---	---	---	---	-	8	0
2900: Playas-----	0-6	40-70	1.50-1.70	0.0015-0.06	0.02-0.04	6.0-8.9	0.0-0.1	.37	.37	-	4	86
	6-60	35-70	1.60-1.80	0.0015-0.06	0.02-0.04	6.0-8.9	0.0-0.1	.37	.37			
2901: Playas-----	0-6	27-40	1.50-1.70	0.0015-0.06	0.02-0.04	6.0-8.9	0.0-0.1	.37	.37	-	4L	86
	6-60	35-70	1.60-1.80	0.0015-0.06	0.02-0.04	6.0-8.9	0.0-0.1	.37	.37			
Corbilt-----	0-4	5-10	1.35-1.50	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28	4	4	86
	4-32	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.15	.28			
	32-56	2-6	1.35-1.55	2-6	0.06-0.07	0.0-2.9	0.0-0.5	.10	.28			
	56-60	---	---	0.06-0.2	---	---	---	---	---			
Bluepoint-----	0-9	2-6	1.45-1.65	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17	5	2	134
	9-17	2-6	1.50-1.65	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.10	.28			
	17-41	2-6	1.50-1.65	6-20	0.05-0.09	0.0-2.9	0.0-0.5	.17	.17			
	41-60	2-10	1.50-1.65	2-6	0.05-0.14	0.0-2.9	0.0-0.5	.24	.24			
2903: Playas-----	0-6	27-40	1.50-1.70	0.0015-0.06	0.02-0.04	6.0-8.9	0.0-0.1	.37	.37	-	4L	86
	6-60	35-70	1.60-1.80	0.0015-0.06	0.02-0.04	6.0-8.9	0.0-0.1	.37	.37			
Mobl-----	0-2	5-15	1.40-1.55	2-6	0.11-0.14	0.0-2.9	0.0-0.5	.24	.28	3	3	86
	2-7	20-30	1.40-1.60	0.2-0.6	0.13-0.19	3.0-5.9	0.0-0.5	.24	.24			
	7-17	5-15	1.40-1.60	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.17	.17			
	17-60	5-15	1.40-1.60	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.28			
Kawich-----	0-2	0-5	1.50-1.65	20-101	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	5	1	250
	2-60	0-5	1.50-1.65	20-101	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
2910: Dune Land-----	0-6	0-1	1.50-1.60	6-20	0.04-0.05	0.0-2.9	0.0-0.1	.15	.20	5	1	250
	6-60	0-1	1.50-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.1	.10	.20			
2920: Dumps-----	---	---	---	---	---	---	---	---	---	-	---	---

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2930:												
Seralin-----	0-2	10-18	1.40-1.55	0.6-2	0.03-0.05	0.0-2.9	0.8-2.0	.10	.49	1	8	0
	2-7	10-18	1.35-1.55	0.6-2	0.06-0.08	0.0-2.9	1.0-2.0	.20	.49			
	7-14	10-18	1.35-1.55	0.6-2	0.08-0.10	0.0-2.9	0.0-0.5	.17	.43			
	14-18	---	---	0.0000-0.0015	---	---	---	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---	---	---	-	---	---
Sed-----	0-7	8-16	1.35-1.50	0.6-2	0.08-0.11	0.0-2.9	1.0-2.0	.10	.32	2	7	38
	7-20	20-30	1.30-1.50	0.2-0.6	0.08-0.11	3.0-5.9	0.5-1.0	.05	.43			
	20-24	20-30	1.30-1.50	0.2-0.6	0.04-0.06	3.0-5.9	0.0-0.5	.05	.43			
	24-34	---	---	0.0000-0.0015	---	---	---	---	---			
2950:												
Pits-----	---	---	---	---	---	---	---	---	---	-	---	---
2951:												
Pits-----	---	---	---	---	---	---	---	---	---	-	---	---
2960:												
Tomel-----	0-3	10-18	1.40-1.55	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.10	.37	1	5	56
	3-19	20-30	1.20-1.40	0.2-0.6	0.07-0.13	0.0-2.9	0.0-0.5	.15	.43			
	19-26	---	---	0.0000-0.0015	---	---	---	---	---			
	26-60	2-8	1.50-1.70	20-101	0.03-0.05	0.0-2.9	0.0-0.5	.05	.28			
Ardivey-----	0-4	12-18	1.35-1.55	2-6	0.05-0.08	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	4-14	18-35	1.30-1.45	0.2-0.6	0.08-0.13	0.0-2.9	0.0-0.5	.10	.43			
	14-60	6-12	1.45-1.60	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.24			
Wardenot-----	0-5	3-8	1.50-1.65	6-20	0.04-0.06	0.0-2.9	0.0-0.5	.02	.24	5	4	86
	5-60	5-10	1.35-1.55	6-20	0.04-0.08	0.0-2.9	0.0-0.5	.05	.28			
2961:												
Tomel-----	0-3	10-18	1.40-1.55	2-6	0.06-0.09	0.0-2.9	0.0-0.5	.10	.37	1	5	56
	3-19	20-30	1.20-1.40	0.2-0.6	0.07-0.13	0.0-2.9	0.0-0.5	.15	.43			
	19-26	---	---	0.0000-0.0015	---	---	---	---	---			
	26-60	2-8	1.50-1.70	20-101	0.03-0.05	0.0-2.9	0.0-0.5	.05	.28			
Breko-----	0-6	5-18	1.40-1.55	2-6	0.10-0.12	0.0-2.9	1.0-2.0	.15	.28	3	4	86
	6-21	25-35	1.40-1.60	0.2-0.6	0.12-0.15	3.0-5.9	0.5-1.0	.10	.32			
	21-29	25-35	1.40-1.60	0.2-0.6	0.05-0.08	3.0-5.9	0.5-1.0	.05	.32			
	29-60	5-15	1.50-1.70	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.05	.20			
Wardenot-----	0-5	5-18	1.40-1.55	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.10	.32	5	4	86
	5-60	5-10	1.35-1.55	6-20	0.04-0.08	0.0-2.9	0.0-0.5	.05	.28			
2970:												
Destazo-----	0-11	27-35	1.35-1.50	0.2-0.6	0.16-0.19	3.0-5.9	0.0-0.5	.24	.43	3	5	56
	11-52	20-35	1.30-1.45	0.2-0.6	0.03-0.09	3.0-5.9	0.0-0.5	.17	.37			
	52-60	27-35	1.50-1.65	0.2-0.6	0.15-0.18	3.0-5.9	0.0-0.5	.28	.43			
Nowoy-----	0-3	3-8	1.50-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.10	.28	3	3	86
	3-20	5-10	1.40-1.60	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.10	.32			
	20-60	27-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.37	.37			
Gullied Land-----	0-60	---	---	0.0015-6	0.00-0.00	---	---	---	---	-	8	0
2971:												
Upspring-----	0-2	10-18	1.25-1.45	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.15	.24	1	5	56
	2-12	10-18	1.30-1.50	2-6	0.04-0.09	0.0-2.9	0.0-0.5	.17	.24			
	12-22	---	---	0.0000-0.0015	---	---	---	---	---			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
2990:												
Lealandic-----	0-5	8-20	1.40-1.55	2-6	0.04-0.06	0.0-2.9	0.0-0.5	.10	.37	2	5	56
	5-12	35-50	1.25-1.45	0.06-0.2	0.10-0.12	6.0-8.9	0.0-0.5	.15	.32			
	12-23	35-50	1.25-1.40	0.06-0.2	0.07-0.10	6.0-8.9	0.0-0.5	.10	.43			
	23-40	---	---	0.0000-0.0015	---	---	---	---	---			
Ashmed-----	0-4	5-15	1.35-1.55	2-6	0.13-0.15	0.0-2.9	0.0-0.5	.20	.32	5	4	86
	4-7	10-15	1.30-1.50	0.2-0.6	0.16-0.19	0.0-2.9	0.0-0.5	.28	.43			
	7-24	25-35	1.25-1.40	0.2-0.6	0.10-0.12	0.0-2.9	0.0-0.5	.05	.37			
	24-32	5-15	1.45-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.05	.32			
	32-60	5-15	1.55-1.75	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.05	.24			
3021:												
Casaga-----	0-1	10-18	1.45-1.60	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.20	.37	5	5	56
	1-21	27-35	1.45-1.60	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.32	.43			
	21-41	27-35	1.40-1.60	0.2-0.6	0.08-0.11	3.0-5.9	0.0-0.5	.17	.55			
	41-60	8-18	1.15-1.35	2-6	0.06-0.10	0.0-2.9	0.0-0.5	.10	.37			
Destazo-----	0-11	27-35	1.35-1.50	0.2-0.6	0.16-0.19	3.0-5.9	0.0-0.5	.24	.43	3	5	56
	11-52	20-35	1.30-1.45	0.2-0.6	0.03-0.09	3.0-5.9	0.0-0.5	.17	.37			
	52-60	27-35	1.50-1.65	0.2-0.6	0.15-0.18	3.0-5.9	0.0-0.5	.28	.43			
Yurm-----	0-3	10-20	1.25-1.45	0.6-2	0.12-0.14	0.0-2.9	0.0-0.5	.20	.37	1	5	56
	3-16	5-18	1.50-1.70	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.37			
	16-60	---	---	0.0015-0.06	---	---	---	---	---			
3022:												
Casaga-----	0-1	20-27	1.40-1.60	0.6-2	0.16-0.18	3.0-5.9	0.0-0.5	.24	.43	4	6	48
	1-21	27-35	1.45-1.60	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.32	.37			
	21-41	27-35	1.40-1.60	0.2-0.6	0.08-0.11	3.0-5.9	0.0-0.5	.17	.49			
	41-60	8-18	1.15-1.35	2-6	0.06-0.10	0.0-2.9	0.0-0.5	.10	.28			
Woda-----	0-1	5-10	1.35-1.55	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.37	.43	1	3	86
	1-10	5-10	1.35-1.55	2-6	0.10-0.12	0.0-2.9	0.0-0.5	.37	.43			
	10-18	20-30	1.25-1.45	0.2-0.6	0.16-0.18	0.0-2.9	0.0-0.5	.24	.43			
	18-28	---	---	0.0000-0.0015	---	---	---	---	---			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
3052:												
Bobnbob-----	0-7	27-40	1.15-1.35	0.06-0.2	0.19-0.21	3.0-5.9	0.5-1.0	.28	.28	5	4L	86
	7-29	27-35	1.25-1.45	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.28	.28			
	29-38	20-40	1.25-1.45	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.28	.28			
	38-52	27-35	1.25-1.45	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.32	.32			
	52-60	10-20	1.40-1.55	0.6-2	0.11-0.13	0.0-2.9	0.0-0.5	.32	.32			
Caslo-----	0-1	35-40	1.10-1.30	0.06-0.2	0.18-0.20	6.0-8.9	0.0-0.8	.24	.24	5	4	86
	1-10	40-60	1.10-1.30	0.06-0.2	0.18-0.20	6.0-8.9	0.0-0.5	.28	.28			
	10-60	27-35	1.15-1.35	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.28	.28			
Aquic Calciorthids--	---	---	---	---	---	---	---	---	---	-	---	---
3101:												
Bluepoint-----	0-9	2-6	1.45-1.65	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17	5	1	250
	9-17	2-6	1.50-1.65	6-20	0.05-0.08	0.0-2.9	0.0-0.5	.10	.28			
	17-41	2-6	1.50-1.65	6-20	0.05-0.09	0.0-2.9	0.0-0.5	.17	.17			
	41-60	2-10	1.50-1.65	2-6	0.05-0.14	0.0-2.9	0.0-0.5	.24	.24			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind erodi- bility group	Wind erodi- bility index
								Kw	Kf	T		
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
Besherm-----	0-2	27-40	1.35-1.55	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.32	.32	5	4L	86
	2-11	40-60	1.30-1.50	0.06-0.2	0.15-0.17	6.0-8.9	0.0-0.5	.28	.28			
	11-60	35-50	1.30-1.50	0.06-0.2	0.15-0.17	6.0-8.9	0.0-0.5	.28	.28			
3120: Nowoy-----	0-3	3-8	1.50-1.65	6-20	0.05-0.07	0.0-2.9	0.0-0.5	.10	.28	3	3	86
	3-20	5-10	1.40-1.60	2-6	0.03-0.06	0.0-2.9	0.0-0.5	.10	.32			
	20-60	27-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.37	.37			
Tanazza-----	0-2	5-15	1.35-1.45	0.6-2	0.04-0.07	0.0-2.9	0.0-0.5	.10	.32	4	5	56
	2-15	15-25	1.20-1.40	0.2-0.6	0.13-0.20	3.0-5.9	0.0-0.5	.49	.49			
	15-45	25-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.43	.43			
	45-60	0-0	1.15-1.35	0.06-20	---	---	---	---	---			
Yurm-----	0-3	8-16	1.35-1.50	0.6-2	0.08-0.11	0.0-2.9	0.0-0.5	.10	.37	1	6	48
	3-16	5-18	1.50-1.70	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.37			
	16-60	---	---	0.0015-0.06	---	---	---	---	---			
3150: Casaga-----	0-1	10-18	1.45-1.60	0.6-2	0.12-0.15	0.0-2.9	0.0-0.5	.20	.37	5	5	56
	1-21	27-35	1.45-1.60	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.32	.43			
	21-41	27-35	1.40-1.60	0.2-0.6	0.08-0.11	3.0-5.9	0.0-0.5	.17	.55			
	41-60	8-18	1.15-1.35	2-6	0.06-0.10	0.0-2.9	0.0-0.5	.10	.37			
3230: Alko-----	0-5	5-10	1.50-1.65	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.20	.20	1	3	86
	5-11	8-18	1.50-1.70	2-6	0.08-0.10	0.0-2.9	0.0-0.5	.20	.32			
	11-33	---	---	0.0000-0.0015	---	---	---	---	---			
	33-60	0-5	1.50-1.70	20-101	0.05-0.07	0.0-2.9	0.0-0.5	.10	.17			
Casaga-----	0-1	20-27	1.40-1.60	0.6-2	0.16-0.18	3.0-5.9	0.0-0.5	.24	.43	4	5	56
	1-21	27-35	1.45-1.60	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.32	.37			
	21-41	27-35	1.40-1.60	0.2-0.6	0.08-0.11	3.0-5.9	0.0-0.5	.17	.49			
	41-60	8-18	1.15-1.35	2-6	0.06-0.10	0.0-2.9	0.0-0.5	.10	.28			
3252: Bobnbob-----	0-7	10-20	1.30-1.50	0.2-0.6	0.13-0.15	0.0-2.9	0.0-0.8	.24	.24	5	3	86
	7-29	27-35	1.25-1.45	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.28	.28			
	29-38	20-40	1.25-1.45	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.28	.28			
	38-52	27-35	1.25-1.45	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.32	.32			
	52-60	10-20	1.40-1.55	0.6-2	0.11-0.13	0.0-2.9	0.0-0.5	.32	.32			
Cobatus-----	0-2	15-25	1.40-1.60	0.6-2	0.15-0.17	3.0-5.9	0.0-0.5	.32	.32	5	4L	86
	2-14	15-25	1.35-1.55	0.6-2	0.15-0.17	3.0-5.9	0.0-0.5	.32	.32			
	14-60	20-30	1.50-1.70	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.32	.32			
Aquic Calciorthids--	---	---	---	---	---	---	---	---	---	---	---	---
3302: Rumpah-----	0-3	40-60	1.30-1.50	0.06-0.2	0.14-0.16	6.0-8.9	0.0-0.5	.32	.32	5	4	86
	3-54	45-60	1.25-1.45	0.0015-0.06	0.14-0.17	6.0-8.9	0.0-0.5	.28	.28			
	54-60	40-60	1.25-1.45	0.0015-0.06	0.14-0.17	6.0-8.9	0.0-0.5	.28	.28			
3313: Besherm-----	0-2	27-40	1.35-1.55	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.32	.32	5	4L	86
	2-11	40-60	1.30-1.50	0.06-0.2	0.15-0.17	6.0-8.9	0.0-0.5	.28	.28			
	11-60	35-50	1.30-1.50	0.06-0.2	0.15-0.17	6.0-8.9	0.0-0.5	.28	.28			
3320: Haymont-----	0-3	5-15	1.35-1.55	0.6-2	0.15-0.17	0.0-2.9	0.0-0.5	.43	.43	5	3	86
	3-40	5-18	1.35-1.55	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.37	.37			
	40-60	5-20	1.35-1.55	0.6-2	0.16-0.18	0.0-2.9	0.0-0.5	.32	.32			
3333: Nopah-----	0-6	10-20	1.40-1.60	0.2-0.6	0.16-0.18	0.0-2.9	0.0-0.5	.49	.49	5	4L	86
	6-60	20-35	1.30-1.50	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.28	.28			

TABLE 12.--PHYSICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Clay	Moist bulk density	Permea- bility (Ksat)	Available water capacity	Linear extensi- bility	Organic matter	Erosion factors			Wind	Wind
								Kw	Kf	T	erodi- bility group	erodi- bility index
	In	Pct	g/cc	In/hr	In/in	Pct	Pct					
4010: Tanazza-----	0-2	5-15	1.35-1.55	0.6-2	0.13-0.15	0.0-2.9	0.0-0.5	.28	.32	4	3	86
	2-15	15-25	1.20-1.40	0.2-0.6	0.13-0.20	3.0-5.9	0.0-0.5	.49	.49			
	15-45	25-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.43	.43			
	45-60	0-0	1.15-1.35	0.06-20	---	---	---	---	---			
Wechech-----	0-2	5-10	1.35-1.50	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.32	1	5	56
	2-13	10-18	1.35-1.50	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.10	.32			
	13-17	---	---	0.0000-0.0015	---	---	---	---	---			
Wodavar-----	0-3	8-16	1.45-1.60	2-6	0.03-0.05	0.0-2.9	0.0-0.5	.05	.32	1	5	56
	3-16	8-16	1.45-1.55	2-6	0.05-0.07	0.0-2.9	0.0-0.5	.10	.32			
	16-33	---	---	0.0000-0.0015	---	---	---	---	---			
	33-60	10-18	1.45-1.55	0.6-2	0.07-0.11	0.0-2.9	0.0-0.5	.15	.49			
Grapevine Taxadjunct	0-5	3-5	1.50-1.70	6-20	0.05-0.06	0.0-2.9	0.0-0.5	.10	.17	2	3	86
	5-28	10-15	1.40-1.60	2-6	0.11-0.16	0.0-2.9	0.0-0.5	.32	.32			
	28-60	10-15	1.35-1.55	0.6-2	0.14-0.16	0.0-2.9	0.0-0.5	.49	.49			
Grapevine Taxadjunct	0-5	3-5	1.50-1.70	6-20	0.05-0.06	0.0-2.9	0.0-0.5	.10	.17	2	3	86
	5-28	10-15	1.40-1.60	2-6	0.11-0.16	0.0-2.9	0.0-0.5	.32	.32			
	28-60	10-15	1.35-1.55	0.6-2	0.14-0.16	0.0-2.9	0.0-0.5	.49	.49			
Bluepoint-----	0-14	2-6	1.45-1.65	6-20	0.06-0.10	0.0-2.9	0.0-0.5	.17	.17	5	1	250
	14-60	2-6	1.50-1.65	6-20	0.05-0.09	0.0-2.9	0.0-0.5	.17	.17			
4030: Wechech-----	0-2	10-20	1.45-1.55	0.6-2	0.15-0.18	0.0-2.9	0.0-0.5	.15	.28	1	5	56
	2-7	10-20	1.45-1.55	0.6-2	0.05-0.08	0.0-2.9	0.0-0.5	.10	.37			
	7-11	---	---	0.0000-0.0015	---	---	---	---	---			
Nopah-----	0-6	10-20	1.40-1.60	0.2-0.6	0.16-0.18	0.0-2.9	0.0-0.5	.49	.49	5	4L	86
	6-60	20-35	1.30-1.50	0.06-0.2	0.19-0.21	3.0-5.9	0.0-0.5	.28	.28			
Yermo-----	0-6	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24	5	5	56
	6-60	8-18	1.40-1.60	2-6	0.06-0.08	0.0-2.9	0.0-0.5	.05	.24			
4060: Besherm-----	0-2	27-40	1.35-1.55	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.32	.32	5	4L	86
	2-11	40-60	1.30-1.50	0.06-0.2	0.15-0.17	6.0-8.9	0.0-0.5	.28	.28			
	11-60	35-50	1.30-1.50	0.06-0.2	0.15-0.17	6.0-8.9	0.0-0.5	.28	.28			
Tanazza-----	0-2	18-27	1.25-1.45	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.49	.49	4	4L	86
	2-15	15-25	1.20-1.40	0.2-0.6	0.13-0.20	3.0-5.9	0.0-0.5	.49	.49			
	15-45	25-35	1.20-1.40	0.2-0.6	0.19-0.21	3.0-5.9	0.0-0.5	.43	.43			
	45-60	0-0	1.15-1.35	0.06-20	---	---	---	---	---			
4070: Gynelle-----	0-3	2-5	1.55-1.75	20-101	0.03-0.04	0.0-2.9	0.0-0.5	.02	.24	5	4	86
	3-60	2-10	1.55-1.75	6-20	0.03-0.05	0.0-2.9	0.0-0.5	.02	.20			
Cirac-----	0-4	8-18	1.50-1.70	2-6	0.08-0.11	0.0-2.9	0.0-0.5	.15	.28	5	4	86
	4-60	8-18	1.45-1.65	2-6	0.11-0.13	0.0-2.9	0.0-0.5	.24	.32			
Kawich-----	0-2	0-5	1.50-1.65	20-101	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15	5	1	250
	2-60	0-5	1.50-1.65	20-101	0.05-0.07	0.0-2.9	0.0-0.5	.15	.15			
4071: Corbilt-----	0-4	3-8	1.45-1.55	6-20	0.09-0.10	0.0-2.9	0.0-0.1	.15	.28	5	4	86
	4-60	5-10	1.35-1.55	2-6	0.11-0.13	0.0-2.9	0.0-0.1	.15	.28			
4080: Water-----	---	---	---	---	---	---	---	---	---	-	---	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS

(Absence of an entry indicates that data were not estimated.)

[illegible]

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

[illegible]

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
St. Thomas-----	0-3	2.0-6.0	---	7.9-9.0	25-40	0	0.0-2.0	0-2
	3-12	4.0-10	---	7.9-9.0	25-40	0	0.0-2.0	0-2
	12-22	---	---	---	---	---	---	---
St. Thomas-----	0-2	2.0-6.0	---	7.9-9.0	25-40	0	0.0-2.0	0-2
	2-12	4.0-10	---	7.9-9.0	25-40	0	0.0-2.0	0-2
	12-22	---	---	---	---	---	---	---
2010:								
Longjim-----	0-3	7.0-15	---	7.9-8.4	5-15	0	0.0-2.0	0-5
	3-8	7.0-15	---	8.5-9.0	5-15	0	0.0-2.0	0-5
	8-16	1.0-7.0	---	8.5-9.0	5-15	0	0.0-2.0	0-5
	16-20	---	---	---	---	---	---	---
	20-45	---	---	---	---	---	---	---
2011:								
Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
2012:								
Zalda-----	0-3	3.0-10	---	7.9-8.4	0-5	0	0.0-4.0	0-5
	3-7	3.0-10	---	8.5-9.0	1-5	0	0.0-4.0	0-5
	7-8	---	---	---	---	---	---	---
	8-18	---	---	---	---	---	---	---
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
Upspring-----	0-2	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0
	2-12	4.0-10	---	7.9-8.4	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---
2013:								
Longjim-----	0-3	5.0-12	---	8.5-9.0	20-30	0	0.0-4.0	1-5
	3-8	7.0-15	---	8.5-9.0	5-15	0	0.0-2.0	0-5
	8-16	1.0-7.0	---	8.5-9.0	5-15	0	0.0-2.0	0-5
	16-20	---	---	---	---	---	---	---
	20-45	---	---	---	---	---	---	---
Yurm-----	0-3	3.0-6.0	---	7.9-8.4	10-15	0	4.0-8.0	5-12
	3-16	3.0-10	---	7.9-9.0	15-30	0	4.0-8.0	5-12
	16-60	---	---	---	---	---	---	---
2020:								
Weiser-----	0-6	3.0-10	---	7.9-9.0	25-40	0	0.0-2.0	0-5
	6-60	3.0-10	---	7.9-9.0	35-50	0	0.0-2.0	0-5
Canoto-----	0-11	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
	11-60	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2021:								
Weiser-----	0-6	3.0-10	---	7.9-9.0	25-40	0	0.0-2.0	0-5
	6-60	3.0-10	---	7.9-9.0	35-50	0	0.0-2.0	0-5
Nickel-----	0-7	2.0-5.0	---	7.9-9.0	1-5	0	0.0-2.0	0-2
	7-19	3.0-6.0	---	7.9-9.0	5-10	0	0.0-4.0	0-2
	19-60	2.0-5.0	---	7.9-9.0	5-25	0	0.0-4.0	0-5
2023:								
Commski-----	0-5	5.0-10	---	7.9-9.0	15-30	0	0.0-2.0	1-5
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	0.0-2.0	1-5
	14-60	2.0-8.0	---	7.9-9.0	30-50	0	4.0-8.0	1-12
Commski-----	0-5	5.0-10	---	7.9-9.0	15-30	0	0.0-2.0	1-5
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	0.0-2.0	1-5
	14-60	2.0-8.0	---	7.9-9.0	30-50	0	4.0-8.0	1-12
Sezna-----	0-3	3.0-9.0	---	7.9-9.0	10-20	0	0.0-4.0	0-5
	3-18	13-19	---	7.9-9.0	10-20	0	0.0-4.0	0-5
	18-60	---	---	---	---	---	---	---
2030:								
Corbilt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-2.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
2031:								
Corbilt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-2.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
Skelon-----	0-4	3.0-6.0	---	7.9-9.0	5-10	0	0.0-4.0	0-5
	4-28	2.0-6.0	---	7.4-9.0	10-25	0	0.0-4.0	0-5
	28-44	---	---	---	---	---	---	---
	44-52	3.0-6.0	---	8.5-9.0	15-30	0	0.0-4.0	0-5
	52-60	0.0-4.0	---	8.5-9.0	10-20	0	0.0-4.0	0-5
2040:								
Yurm-----	0-3	3.0-6.0	---	7.9-8.4	10-15	0	4.0-8.0	5-12
	3-16	3.0-10	---	7.9-9.0	15-30	0	4.0-8.0	5-12
	16-60	---	---	---	---	---	---	---
Canoto-----	0-11	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
	11-60	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
Yurm, moist-----	0-3	3.0-6.0	---	7.9-8.4	10-15	0	4.0-8.0	5-12
	3-16	3.0-10	---	7.9-9.0	15-30	0	4.0-8.0	5-12
	16-60	---	---	---	---	---	---	---
2050:								
Canoto-----	0-11	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
	11-60	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
Naye-----	0-7	3.0-10	---	7.9-9.0	15-30	0	0.0-2.0	0-2
	7-25	3.0-10	---	7.9-9.0	30-50	0-5	0.0-2.0	0-2
	25-39	---	---	---	---	---	---	---
2051:								
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Woda-----	0-1	3.0-7.0	---	7.9-8.4	40-60	0	4.0-8.0	5-12
	1-10	3.0-7.0	---	7.9-8.4	40-60	0	4.0-8.0	5-12
	10-18	15-20	---	8.5-9.0	40-60	0	4.0-8.0	5-12
	18-60	---	---	---	---	---	---	---
Nowoy-----	0-3	2.0-5.0	---	7.9-8.4	10-25	0	0.0-4.0	0-5
	3-20	3.0-6.0	---	7.9-8.4	25-45	0	0.0-4.0	0-5
	20-60	14-19	---	8.5-9.0	40-60	0	4.0-8.0	5-12
2052: Canoto-----	0-11	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
	11-60	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
2053: Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
Arizo-----	0-8	3.0-10	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	0.0-3.0	---	7.4-9.0	5-15	0	0.0-2.0	1-12
2054: Yermo, hot-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
2055: Canoto-----	0-11	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
	11-60	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
Canoto, MOIST-----	0-11	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
	11-60	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
2057: Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Commski-----	0-5	5.0-10	---	7.9-9.0	15-30	0	0.0-2.0	1-5
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	0.0-2.0	1-5
	14-60	2.0-8.0	---	7.9-9.0	30-50	0	4.0-8.0	1-12
2058: Canoto-----	0-11	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
	11-60	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0
Nickel-----	0-7	5.0-10	---	7.9-9.0	1-5	0	0.0-2.0	0-2
	7-19	3.0-6.0	---	7.9-9.0	5-10	0	0.0-4.0	0-2
	19-60	2.0-5.0	---	7.9-9.0	5-25	0	0.0-4.0	0-5

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2060:								
Purob-----	0-3	4.0-10	---	7.9-8.4	10-20	0	0.0-2.0	1-5
	3-10	4.0-10	---	7.9-8.4	10-20	0	0.0-2.0	1-5
	10-19	4.0-10	---	7.9-8.4	30-70	0	2.0-4.0	1-12
	19-60	---	---	---	---	---	---	---
Irongold-----	0-1	5.0-10	---	7.9-8.4	15-30	0	0.0-2.0	0-5
	1-7	8.0-15	---	7.9-8.4	15-30	0	0.0-2.0	0-5
	7-11	5.0-10	---	7.9-8.4	20-40	0	0.0-2.0	0-5
	11-34	---	---	---	---	---	---	---
	34-60	1.0-5.0	---	7.9-8.4	50-70	0	0	0-5
2061:								
Vace-----	0-12	5.0-11	---	7.9-8.4	10-20	0	2.0-4.0	5-12
	12-30	---	---	---	---	---	---	---
	30-60	1.0-4.0	---	7.9-8.4	10-20	0	0.0-4.0	5-30
2062:								
Purob-----	0-3	7.0-14	---	7.9-9.0	10-30	0	0.0-4.0	0-5
	3-19	10-15	---	7.9-9.0	40-60	0	0.0-4.0	0-5
	19-26	---	---	---	---	---	---	---
Niavi-----	0-2	7.0-14	---	7.9-8.4	1-3	0	0.0-2.0	0-5
	2-8	6.0-14	---	7.9-8.4	1-3	0	0.0-2.0	0-5
	8-29	2.0-6.0	---	7.9-8.4	3-12	0	0.0-2.0	0-5
	29-60	2.0-6.0	---	7.9-8.4	5-12	0	0.0-4.0	0-12
2064:								
Longjim, summer precip.-----	0-3	5.0-12	---	8.5-9.0	20-30	0	0.0-4.0	1-5
	3-8	7.0-15	---	8.5-9.0	5-15	0	0.0-2.0	0-5
	8-16	1.0-7.0	---	8.5-9.0	5-15	0	0.0-2.0	0-5
	16-20	---	---	---	---	---	---	---
	20-45	---	---	---	---	---	---	---
Purob-----	0-3	7.0-14	---	7.9-9.0	10-30	0	0.0-4.0	0-5
	3-19	10-15	---	7.9-9.0	40-60	0	0.0-4.0	0-5
	19-26	---	---	---	---	---	---	---
Niavi-----	0-2	7.0-14	---	7.9-8.4	1-3	0	0.0-2.0	0-5
	2-8	6.0-14	---	7.9-8.4	1-3	0	0.0-2.0	0-5
	8-29	2.0-6.0	---	7.9-8.4	3-12	0	0.0-2.0	0-5
	29-60	2.0-6.0	---	7.9-8.4	5-12	0	0.0-4.0	0-12
2070:								
Shamock-----	0-4	1.0-5.0	---	7.9-9.0	0-5	0	0.0-2.0	1-5
	4-37	3.0-5.0	---	7.9-9.6	1-10	0	0.0-2.0	1-5
	37-58	---	---	---	---	---	---	---
	58-60	---	---	---	---	---	---	---
2071:								
Shamock-----	0-4	1.0-5.0	---	7.9-9.0	0-5	0	0.0-2.0	1-5
	4-37	3.0-5.0	---	7.9-9.6	1-10	0	0.0-2.0	1-5
	37-58	---	---	---	---	---	---	---
	58-60	---	---	---	---	---	---	---
Skelon-----	0-4	2.0-8.0	---	7.9-8.4	10-20	0	0.0-4.0	1-12
	4-28	2.0-8.0	---	7.9-9.6	10-20	0	0.0-4.0	1-12
	28-44	---	---	---	---	---	---	---
	44-52	2.0-8.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
	52-60	0.0-5.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

[illegible]

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2140: Jonnic-----	0-2	12-17	---	7.9-9.0	5-10	0	0.0-4.0	0-2
	2-21	19-32	---	8.5-9.0	5-10	0	0.0-4.0	0-2
	21-38	13-19	---	8.5-9.0	10-15	0	0.0-4.0	0-2
	38-42	---	---	---	---	---	---	---
Niavi-----	0-2	7.0-14	---	7.9-8.4	1-3	0	0.0-2.0	0-5
	2-8	6.0-14	---	7.9-8.4	1-3	0	0.0-2.0	0-5
	8-29	2.0-6.0	---	7.9-8.4	3-12	0	0.0-2.0	0-5
	29-60	2.0-6.0	---	7.9-8.4	5-12	0	0.0-4.0	0-12
2151: Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
Bluepoint-----	0-9	1.0-5.0	---	7.4-9.0	1-10	0	0.0-2.0	1-5
	9-17	1.0-5.0	---	7.9-9.0	1-10	0	0.0-2.0	1-5
	17-41	1.0-5.0	---	7.9-9.0	1-10	0-1	0.0-4.0	1-12
	41-60	1.0-5.0	---	7.9-9.0	0-15	0-1	0.0-4.0	1-12
Dune Land-----	0-6	0.0-1.0	---	7.4-8.4	0	0	0	0
	6-60	0.0-1.0	---	7.4-8.4	0	0	0	0
2152: Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
2153: Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
Corbilt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-4.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
Commski-----	0-5	5.0-10	---	7.9-9.0	15-30	0	0.0-2.0	1-5
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	0.0-2.0	1-5
	14-60	2.0-8.0	---	7.9-9.0	30-50	0	4.0-8.0	1-12
2161: Casaga-----	0-1	15-20	---	8.5-9.0	10-15	0	16.0-32.0	30-90
	1-21	20-25	---	7.9-9.6	10-25	0-5	8.0-16.0	13-60
	21-41	20-25	---	7.9-9.6	10-25	0-5	8.0-16.0	13-60
	41-60	6.0-15	---	7.4-9.0	15-30	2-10	8.0-16.0	13-60
Nowoy-----	0-3	2.0-5.0	---	7.9-8.4	10-25	0	0.0-4.0	0-5
	3-20	3.0-6.0	---	7.9-8.4	25-45	0	0.0-4.0	0-5
	20-60	14-19	---	8.5-9.0	40-60	0	4.0-8.0	5-12
2162: Casaga-----	0-1	5.0-10	---	8.5-9.6	10-15	0	8.0-16.0	46-90
	1-21	14-19	---	7.9-9.6	10-25	0-1	8.0-16.0	13-50
	21-41	14-19	---	8.5-9.6	10-25	0-1	8.0-16.0	13-50
	41-60	4.0-10	---	7.4-8.4	15-30	2-10	8.0-16.0	13-30
Panor-----	0-1	15-19	---	8.5-9.0	1-10	0	8.0-16.0	13-30
	1-5	5.0-11	---	8.5-9.0	5-10	0	8.0-16.0	13-30
	5-23	14-19	---	8.5-9.0	5-10	0-2	16.0-32.0	13-45
	23-60	14-19	---	8.5-9.0	5-10	0-1	16.0-32.0	13-45

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
2171: Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
Skelon-----	0-4	2.0-8.0	---	7.9-8.4	10-20	0	0.0-4.0	1-12
	4-28	2.0-8.0	---	7.9-9.6	10-20	0	0.0-4.0	1-12
	28-44	---	---	---	---	---	---	---
	44-52	2.0-8.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
	52-60	0.0-5.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
2172: Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
2181: Skelon-----	0-4	3.0-6.0	---	7.9-9.0	5-10	0	0.0-4.0	0-5
	4-28	2.0-6.0	---	7.4-9.0	10-25	0	0.0-4.0	0-5
	28-44	---	---	---	---	---	---	---
	44-52	3.0-6.0	---	8.5-9.0	15-30	0	0.0-4.0	0-5
	52-60	0.0-4.0	---	8.5-9.0	10-20	0	0.0-4.0	0-5
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Pinez-----	0-4	3.0-6.0	---	7.9-9.0	1-5	0	0.0-2.0	0-5
	4-10	5.0-9.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	10-29	9.0-19	---	7.9-9.0	5-10	0	0.0-2.0	0-5
	29-41	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	0-5
	41-51	---	---	---	---	---	---	---
2184: Skelon-----	0-4	3.0-6.0	---	7.9-9.0	5-10	0	0.0-4.0	0-5
	4-28	2.0-6.0	---	7.4-9.0	10-25	0	0.0-4.0	0-5
	28-44	---	---	---	---	---	---	---
	44-52	3.0-6.0	---	8.5-9.0	15-30	0	0.0-4.0	0-5
	52-60	0.0-4.0	---	8.5-9.0	10-20	0	0.0-4.0	0-5
Bullfor-----	0-1	1.0-4.0	---	7.9-8.4	0-2	0	0.0-4.0	0-5
	1-24	1.0-4.0	---	7.9-8.4	0-5	0	0.0-4.0	0-5
	24-25	---	---	---	---	---	---	---
	25-60	2.0-5.0	---	8.5-9.0	1-10	0	0.0-4.0	0-5
2185: Skelon-----	0-4	2.0-8.0	---	7.9-8.4	10-20	0	0.0-4.0	1-12
	4-28	2.0-8.0	---	7.9-9.6	10-20	0	0.0-4.0	1-12
	28-44	---	---	---	---	---	---	---
	44-52	2.0-8.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
	52-60	0.0-5.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Ashmed-----	0-4	3.0-9.0	---	9.1-11.0	5-10	0	4.0-8.0	13-30
	4-7	5.0-9.0	---	9.1-11.0	5-15	0	16.0-32.0	30-45
	7-24	13-19	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	24-32	3.0-9.0	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	32-60	3.0-9.0	---	9.1-11.0	5-10	0	8.0-16.0	13-35
2186:								
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Skelon-----	0-4	3.0-6.0	---	7.9-9.0	5-10	0	0.0-4.0	0-5
	4-28	2.0-6.0	---	7.4-9.0	10-25	0	0.0-4.0	0-5
	28-44	---	---	---	---	---	---	---
	44-52	3.0-6.0	---	8.5-9.0	15-30	0	0.0-4.0	0-5
	52-60	0.0-4.0	---	8.5-9.0	10-20	0	0.0-4.0	0-5
Pinez-----	0-4	3.0-6.0	---	7.9-9.0	1-5	0	0.0-2.0	0-5
	4-10	5.0-9.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	10-29	9.0-19	---	7.9-9.0	5-10	0	0.0-2.0	0-5
	29-41	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	0-5
	41-51	---	---	---	---	---	---	---
2191:								
Pinez-----	0-4	3.0-6.0	---	7.9-9.0	1-5	0	0.0-2.0	0-5
	4-10	5.0-9.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	10-29	9.0-19	---	7.9-9.0	5-10	0	0.0-2.0	0-5
	29-41	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	0-5
	41-51	---	---	---	---	---	---	---
Lealandic-----	0-5	4.0-11	---	7.9-9.0	1-5	0	0.0-2.0	0-5
	5-12	18-26	---	7.9-9.0	0-5	0	0.0-4.0	0-12
	12-23	18-26	---	7.9-9.0	1-10	0	0.0-4.0	0-12
	23-40	---	---	---	---	---	---	---
Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
2201:								
Corbitt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-4.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
2202:								
Corbitt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-2.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
Migern-----	0-3	5.0-9.0	---	7.9-8.4	5-10	0	0.0-2.0	0-5
	3-8	10-16	---	7.9-8.4	5-10	0	0.0-2.0	0-5
	8-60	1.0-4.0	---	7.9-8.4	5-15	0	0.0-2.0	0-5
Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2204:								
Corbilt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-2.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
Wodavar-----	0-3	4.0-10	---	7.9-8.4	15-25	0	0.0-4.0	1-5
	3-16	4.0-10	---	7.9-9.0	25-40	0	0.0-4.0	1-12
	16-33	---	---	---	---	---	---	---
	33-60	5.0-10	---	8.5-9.0	40-60	0	0.0-4.0	1-5
Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
2212:								
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Bullfor-----	0-1	1.0-4.0	---	7.9-8.4	0-2	0	0.0-4.0	0-5
	1-24	1.0-4.0	---	7.9-8.4	0-5	0	0.0-4.0	0-5
	24-25	---	---	---	---	---	---	---
	25-60	2.0-5.0	---	8.5-9.0	1-10	0	0.0-4.0	0-5
2214:								
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
2215:								
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
2216:								
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Arizo-----	0-8	1.0-5.0	---	7.4-9.0	0-5	0	0.0-2.0	1-12
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
2218:								
Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
Commski-----	0-5	5.0-10	---	7.9-9.0	20-30	0	2.0-4.0	5-12
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	4.0-8.0	5-12
	14-60	2.0-8.0	---	7.9-9.0	30-50	0-1	4.0-8.0	5-12
2220:								
Canoto-----	0-11	5.0-15	---	7.9-9.0	5-10	0	0.0-4.0	0
	11-60	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
2221: Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
2222: Niavi-----	0-2	7.0-14	---	7.9-8.4	1-3	0	0.0-2.0	0-5
	2-8	6.0-14	---	7.9-8.4	1-3	0	0.0-2.0	0-5
	8-29	2.0-6.0	---	7.9-8.4	3-12	0	0.0-2.0	0-5
	29-60	2.0-6.0	---	7.9-8.4	5-12	0	0.0-4.0	0-12
Jonnice-----	0-2	12-17	---	7.9-9.0	5-10	0	0.0-4.0	0-2
	2-21	19-32	---	8.5-9.0	5-10	0	0.0-4.0	0-2
	21-38	13-19	---	8.5-9.0	10-15	0	0.0-4.0	0-2
	38-42	---	---	---	---	---	---	---
2230: Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Skelon-----	0-4	3.0-6.0	---	7.9-9.0	5-10	0	0.0-4.0	0-5
	4-28	2.0-6.0	---	7.4-9.0	10-25	0	0.0-4.0	0-5
	28-44	---	---	---	---	---	---	---
	44-52	3.0-6.0	---	8.5-9.0	15-30	0	0.0-4.0	0-5
	52-60	0.0-4.0	---	8.5-9.0	10-20	0	0.0-4.0	0-5
2233: Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Skelon-----	0-4	3.0-6.0	---	7.9-9.0	5-10	0	0.0-4.0	0-5
	4-28	2.0-6.0	---	7.4-9.0	10-25	0	0.0-4.0	0-5
	28-44	---	---	---	---	---	---	---
	44-52	3.0-6.0	---	8.5-9.0	15-30	0	0.0-4.0	0-5
	52-60	0.0-4.0	---	8.5-9.0	10-20	0	0.0-4.0	0-5
Bluepoint-----	0-9	1.0-5.0	---	7.4-9.0	1-10	0	0.0-2.0	1-5
	9-17	1.0-5.0	---	7.9-9.0	1-10	0	0.0-2.0	1-5
	17-41	1.0-5.0	---	7.9-9.0	1-10	0-1	0.0-4.0	1-12
	41-60	1.0-5.0	---	7.9-9.0	0-15	0-1	0.0-4.0	1-12
2250: Tokoper-----	0-3	4.0-9.0	---	7.9-8.4	1-20	0	0.0-4.0	0-5
	3-9	10-16	---	7.9-9.0	1-20	0	0.0-4.0	0-5
	9-14	8.0-14	---	7.9-9.0	1-20	0	0.0-8.0	0-12
	14-15	---	---	---	---	---	---	---
	15-25	---	---	---	---	---	---	---
Upspring-----	0-2	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0
	2-12	4.0-10	---	7.9-8.4	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Rock Outcrop-----	---	---	---	---	---	---	---	---
2251: Tokoper-----	0-3	4.0-9.0	---	7.9-8.4	1-20	0	0.0-4.0	0-5
	3-9	10-16	---	7.9-9.0	1-20	0	0.0-4.0	0-5
	9-14	8.0-14	---	7.9-9.0	1-20	0	0.0-8.0	0-12
	14-15	---	---	---	---	---	---	---
	15-25	---	---	---	---	---	---	---
Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---
Pintwater-----	0-3	5.0-15	---	7.9-9.0	5-15	0	0.0-2.0	0-5
	3-11	5.0-15	---	7.9-9.0	10-20	0	0.0-4.0	0-5
	11-15	---	---	---	---	---	---	---
2252: Tokoper-----	0-3	4.0-9.0	---	7.9-8.4	1-20	0	0.0-4.0	0-5
	3-9	10-16	---	7.9-9.0	1-20	0	0.0-4.0	0-5
	9-14	8.0-14	---	7.9-9.0	1-20	0	0.0-8.0	0-12
	14-15	---	---	---	---	---	---	---
	15-25	---	---	---	---	---	---	---
Blacktop-----	0-7	5.0-10	---	7.4-8.4	0	0	0.0-4.0	0-2
	7-17	---	---	---	---	---	---	---
2253: Tokoper-----	0-3	4.0-9.0	---	7.9-8.4	1-20	0	0.0-4.0	0-5
	3-9	10-16	---	7.9-9.0	1-20	0	0.0-4.0	0-5
	9-14	8.0-14	---	7.9-9.0	1-20	0	0.0-8.0	0-12
	14-15	---	---	---	---	---	---	---
	15-25	---	---	---	---	---	---	---
Ardivey-----	0-3	10-20	---	7.9-9.0	0-5	0	0.0-2.0	0-5
	3-14	15-25	---	6.6-8.4	0-10	0	0.0-2.0	0-5
	14-60	5.0-15	---	7.9-9.6	10-30	0	0.0-2.0	1-12
2254: Tokoper-----	0-3	4.0-9.0	---	7.9-8.4	1-20	0	0.0-4.0	0-5
	3-9	10-16	---	7.9-9.0	1-20	0	0.0-4.0	0-5
	9-14	8.0-14	---	7.9-9.0	1-20	0	0.0-8.0	0-12
	14-15	---	---	---	---	---	---	---
	15-25	---	---	---	---	---	---	---
Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---
Espint-----	0-1	6.0-18	---	7.4-8.4	0-3	0	0.0-2.0	0-5
	1-7	18-30	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	7-17	---	---	---	---	---	---	---
2260: Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2261:								
Longjim-----	0-3	7.0-15	---	7.9-8.4	5-15	0	0.0-2.0	0-5
	3-8	7.0-15	---	8.5-9.0	5-15	0	0.0-2.0	0-5
	8-16	1.0-7.0	---	8.5-9.0	5-15	0	0.0-2.0	0-5
	16-20	---	---	---	---	---	---	---
	20-45	---	---	---	---	---	---	---
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Dedas-----	0-3	3.0-5.0	---	7.9-8.4	5-15	0	0.0-2.0	0-5
	3-15	5.0-10	---	7.9-8.4	10-25	0	0.0-2.0	0-5
	15-17	---	---	---	---	---	---	---
	17-27	---	---	---	---	---	---	---
2263:								
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
2266:								
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
2267:								
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
Skelon-----	0-4	2.0-8.0	---	7.9-8.4	10-20	0	0.0-4.0	1-12
	4-28	2.0-8.0	---	7.9-9.6	10-20	0	0.0-4.0	1-12
	28-44	---	---	---	---	---	---	---
	44-52	2.0-8.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
	52-60	0.0-5.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
2268:								
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
Arizo-----	0-8	1.0-5.0	---	7.4-9.0	0-5	0	0.0-2.0	1-12
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2269:								
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Strozi-----	0-5	3.0-9.0	---	7.9-8.4	0-1	0	4.0-8.0	5-12
	5-13	14-19	---	7.9-8.4	0-1	0	4.0-8.0	5-12
	13-32	3.0-6.0	---	7.9-9.0	5-10	0	4.0-8.0	5-12
	32-33	---	---	---	---	---	---	---
	33-60	3.0-6.0	---	7.9-9.0	5-15	0	4.0-8.0	5-12
2270:								
Bluepoint-----	0-9	1.0-5.0	---	7.4-9.0	1-10	0	0.0-2.0	1-5
	9-24	1.0-5.0	---	7.9-9.0	1-10	0	0.0-2.0	1-5
	24-41	1.0-5.0	---	7.9-9.0	1-10	0-1	0.0-4.0	1-12
	41-60	1.0-5.0	---	7.9-9.0	0-15	0-1	0.0-4.0	1-12
2271:								
Kawich-----	0-2	0.0-8.0	---	8.5-9.6	5-20	0	4.0-8.0	1-12
	2-60	0.0-8.0	---	8.5-9.6	5-20	0	4.0-8.0	1-12
Corbitt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-2.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
Wanomie-----	0-2	3.0-6.0	---	7.9-9.0	1-5	0	8.0-16.0	13-30
	2-30	3.0-10	---	7.9-9.0	1-5	0	0.0-4.0	13-30
	30-31	---	---	---	---	---	---	---
	31-60	3.0-6.0	---	7.9-9.0	1-5	0	0.0-4.0	5-12
2280:								
Shorim-----	0-3	3.0-9.0	---	7.9-8.4	5-10	0	0.0-2.0	0-2
	3-10	3.0-9.0	---	7.9-8.4	5-10	0	0.0-2.0	0-2
	10-21	3.0-9.0	---	8.5-9.0	10-20	0	0.0-2.0	0-2
	21-24	---	---	---	---	---	---	---
	24-28	---	---	---	---	---	---	---
Zalda-----	0-3	3.0-10	---	7.9-8.4	0-5	0	0.0-4.0	0-5
	3-7	3.0-10	---	8.5-9.0	1-5	0	0.0-4.0	0-5
	7-8	---	---	---	---	---	---	---
	8-18	---	---	---	---	---	---	---
Upspring-----	0-2	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0
	2-12	4.0-10	---	7.9-8.4	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---
2281:								
Shorim-----	0-3	3.0-9.0	---	7.9-8.4	5-10	0	0.0-2.0	0-2
	3-10	3.0-9.0	---	7.9-8.4	5-10	0	0.0-2.0	0-2
	10-21	3.0-9.0	---	8.5-9.0	10-20	0	0.0-2.0	0-2
	21-24	---	---	---	---	---	---	---
	24-28	---	---	---	---	---	---	---
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12

[illegible]

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2305:								
Tecopa-----	0-1	2.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
	1-7	3.0-6.0	---	7.9-8.4	0	0	0.0-4.0	0-5
	7-17	---	---	---	---	---	---	---
Rock Outcrop-----	---	---	---	---	---	---	---	---
2310:								
Nowoy-----	0-3	2.0-5.0	---	7.9-8.4	10-25	0	0.0-4.0	0-5
	3-20	3.0-6.0	---	7.9-8.4	25-45	0	0.0-4.0	0-5
	20-60	14-19	---	8.5-9.0	40-60	0	4.0-8.0	5-12
Commski-----	0-5	5.0-10	---	7.9-9.0	15-30	0	0.0-2.0	1-5
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	0.0-2.0	1-5
	14-60	2.0-8.0	---	7.9-9.0	30-50	0	4.0-8.0	1-12
2312:								
Commski-----	0-5	5.0-10	---	7.9-9.0	15-30	0	0.0-2.0	1-5
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	0.0-2.0	1-5
	14-60	2.0-8.0	---	7.9-9.0	30-50	0	4.0-8.0	1-12
Tanazza-----	0-2	3.0-9.0	---	7.9-9.0	20-40	0-1	0.0-4.0	0-5
	2-15	8.0-14	---	7.9-9.0	35-50	0-1	0.0-4.0	0-5
	15-45	13-19	---	7.9-9.0	40-70	15-40	0.0-4.0	0-5
	45-60	---	---	---	---	40-60	---	---
2320:								
Wahguyhe-----	0-2	2.0-12	---	7.9-8.4	0-2	0	0.0-2.0	0-5
	2-16	2.0-12	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	16-20	---	---	---	---	---	---	---
Rock Outcrop-----	---	---	---	---	---	---	---	---
Gabbvally-----	0-4	5.0-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	4-12	10-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	12-16	---	---	---	---	---	---	---
2341:								
Naye-----	0-7	3.0-10	---	7.9-9.0	15-30	0	0.0-2.0	0-5
	7-25	3.0-10	---	7.9-9.0	30-50	0-5	0.0-2.0	0-2
	25-39	---	---	---	---	---	---	---
2372:								
Zalda-----	0-3	3.0-10	---	7.9-8.4	0-5	0	0.0-4.0	0-5
	3-7	3.0-10	---	8.5-9.0	1-5	0	0.0-4.0	0-5
	7-8	---	---	---	---	---	---	---
	8-18	---	---	---	---	---	---	---
Bluepoint-----	0-9	1.0-5.0	---	7.4-9.0	1-10	0	0.0-2.0	1-5
	9-17	1.0-5.0	---	7.9-9.0	1-10	0	0.0-2.0	1-5
	17-41	1.0-5.0	---	7.9-9.0	1-10	0-1	0.0-4.0	1-12
	41-60	1.0-5.0	---	7.9-9.0	0-15	0-1	0.0-4.0	1-12
Rock Outcrop-----	---	---	---	---	---	---	---	---
2373:								
Zalda-----	0-3	3.0-10	---	7.9-8.4	0-5	0	0.0-4.0	0-5
	3-7	3.0-10	---	8.5-9.0	1-5	0	0.0-4.0	0-5
	7-8	---	---	---	---	---	---	---
	8-18	---	---	---	---	---	---	---
Rubble Land-----	0-60	---	---	---	0	0	0	0

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Skelon-----	0-4	2.0-8.0	---	7.9-8.4	10-20	0	0.0-4.0	1-12
	4-28	2.0-8.0	---	7.9-9.6	10-20	0	0.0-4.0	1-12
	28-44	---	---	---	---	---	---	---
	44-52	2.0-8.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
	52-60	0.0-5.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
2381:								
Armpup-----	0-3	13-19	---	9.1-9.6	5-15	0	16.0-32.0	13-30
	3-18	18-24	---	9.1-9.6	5-15	0	16.0-32.0	30-45
	18-46	18-24	---	9.1-9.6	15-25	0	8.0-32.0	13-45
	46-55	3.0-6.0	---	9.1-9.6	10-20	0	8.0-16.0	10-13
	55-59	---	---	---	---	---	---	---
Ashmed-----	0-4	3.0-9.0	---	9.1-11.0	5-10	0	4.0-8.0	13-30
	4-7	5.0-9.0	---	9.1-11.0	5-15	0	16.0-32.0	30-45
	7-24	13-19	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	24-32	3.0-9.0	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	32-60	3.0-9.0	---	9.1-11.0	5-10	0	8.0-16.0	13-35
2391:								
Commski-----	0-5	5.0-10	---	7.9-9.0	20-30	0	2.0-4.0	5-12
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	4.0-8.0	5-12
	14-60	2.0-8.0	---	7.9-9.0	30-50	0-1	4.0-8.0	5-12
Ashmed-----	0-4	3.0-9.0	---	9.1-11.0	5-10	0	4.0-8.0	13-30
	4-7	5.0-9.0	---	9.1-11.0	5-15	0	16.0-32.0	30-45
	7-24	13-19	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	24-32	3.0-9.0	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	32-60	3.0-9.0	---	9.1-11.0	5-10	0	8.0-16.0	13-35
2392:								
Commski-----	0-5	5.0-10	---	7.9-9.0	15-30	0	0.0-2.0	1-5
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	0.0-2.0	1-5
	14-60	2.0-8.0	---	7.9-9.0	30-50	0	4.0-8.0	1-12
Ashmed-----	0-4	3.0-9.0	---	9.1-11.0	5-10	0	4.0-8.0	13-30
	4-7	5.0-9.0	---	9.1-11.0	5-15	0	16.0-32.0	31-45
	7-24	13-19	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	24-32	3.0-9.0	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	32-60	3.0-9.0	---	9.1-11.0	5-10	0	8.0-16.0	13-35
2393:								
Commski-----	0-5	5.0-10	---	7.9-9.0	15-30	0	0.0-2.0	1-5
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	0.0-2.0	1-5
	14-60	2.0-8.0	---	7.9-9.0	30-50	0	4.0-8.0	1-12
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
2400:								
Mobl-----	0-2	5.0-10	---	8.5-9.6	1-5	0	16.0-32.0	31-45
	2-7	15-25	---	8.5-9.6	2-5	0	16.0-32.0	31-45
	7-17	3.0-10	---	8.5-9.6	2-5	0	16.0-32.0	31-45
	17-60	3.0-10	---	8.5-9.6	2-5	0	16.0-32.0	13-30
Scottcas-----	0-2	3.0-10	---	7.9-8.4	1-10	0	0.0-4.0	0-2
	2-7	10-20	---	7.9-8.4	1-10	0	0.0-4.0	0-2
	7-15	3.0-10	---	8.5-9.0	10-20	0	4.0-8.0	1-12
	15-21	2.0-8.0	---	8.5-9.6	10-20	0	4.0-8.0	1-12
	21-60	2.0-8.0	---	8.5-9.6	10-20	0	4.0-8.0	0-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2401:								
Skelon-----	0-4	2.0-8.0	---	7.9-8.4	10-20	0	0.0-4.0	1-12
	4-28	2.0-8.0	---	7.9-9.6	10-20	0	0.0-4.0	1-12
	28-44	---	---	---	---	---	---	---
	44-52	2.0-8.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
	52-60	0.0-5.0	---	8.5-9.0	10-20	0	0.0-4.0	1-12
Bacho-----	0-3	4.0-11	---	7.9-8.4	1-5	0	0.0-2.0	0-5
	3-11	18-26	---	7.9-8.4	1-10	0	0.0-2.0	0-5
	11-36	---	---	---	---	---	---	---
2421:								
Orwash-----	0-3	2.0-6.0	---	7.9-9.0	0-10	0	0.0-2.0	5-12
	3-18	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	5-12
	18-60	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	5-12
Wilst-----	0-4	5.0-10	---	7.9-8.4	1-5	0	0.0-2.0	0-2
	4-10	4.0-15	---	7.9-8.4	1-5	0	0.0-2.0	0-2
	10-33	4.0-15	---	7.9-8.4	1-5	0	0.0-2.0	0-2
	33-43	---	---	---	---	---	---	---
Agon-----	0-3	3.0-8.0	---	7.9-8.4	1-5	0	0.0-2.0	0-5
	3-32	1.0-3.0	---	7.9-8.4	5-10	0	0.0-2.0	0-5
	32-33	---	---	---	---	---	---	---
	33-37	---	---	---	---	---	---	---
2422:								
Orwash-----	0-3	2.0-6.0	---	7.9-9.0	0-10	0	0.0-2.0	5-12
	3-18	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	5-12
	18-60	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	5-12
Louderback-----	0-3	4.0-7.0	---	9.1-11.0	1-5	0	16.0-32.0	13-30
	3-40	1.0-6.0	---	9.1-11.0	1-5	0	2.0-4.0	13-30
	40-60	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	5-12
Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
2423:								
Orwash-----	0-3	2.0-6.0	---	7.9-9.0	0-10	0	0.0-2.0	5-12
	3-18	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	5-12
	18-60	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	5-12
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
Wanomie-----	0-2	3.0-6.0	---	7.9-9.0	1-5	0	8.0-16.0	13-30
	2-30	3.0-10	---	7.9-9.0	1-5	0	0.0-4.0	13-30
	30-31	---	---	---	---	---	---	---
	31-60	3.0-6.0	---	7.9-9.0	1-5	0	0.0-4.0	5-12
2425:								
Orwash-----	0-3	2.0-6.0	---	7.9-9.0	0-10	0	0.0-2.0	5-12
	3-18	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	5-12
	18-60	2.0-5.0	---	7.9-9.0	5-15	0	0.0-2.0	5-12
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Arizo-----	0-8	2.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	0-5
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12
2431: Zibate-----	0-6	6.0-12	---	7.4-9.0	0-5	0	0.0-2.0	0-5
	6-19	11-22	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	19-23	---	---	---	---	---	---	---
Zyplar-----	0-7	5.0-11	---	7.4-8.4	1-5	0	0.0-2.0	0-5
	7-12	13-19	---	7.4-8.4	1-5	0	0.0-2.0	0-5
	12-16	---	---	---	---	---	---	---
Dedas-----	0-3	3.0-5.0	---	7.9-8.4	5-15	0	0.0-2.0	0-5
	3-15	5.0-10	---	7.9-8.4	10-25	0	0.0-2.0	0-5
	15-17	---	---	---	---	---	---	---
	17-27	---	---	---	---	---	---	---
2432: Zibate-----	0-6	6.0-12	---	7.4-9.0	0-5	0	0.0-2.0	0-5
	6-19	11-22	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	19-23	---	---	---	---	---	---	---
2434: Cruzspring-----	0-1	6.0-11	---	7.9-8.4	1-3	0	0.2-1.0	0-5
	1-3	6.0-11	---	7.9-8.4	1-3	0	0.2-1.0	0-5
	3-10	12-17	---	7.9-8.4	1-5	0	0.2-1.0	0-5
	10-13	---	---	---	---	---	---	---
	13-17	---	---	---	---	---	---	---
Schader-----	0-2	7.0-14	---	7.4-8.4	0-2	0	0.0-0.4	0
	2-9	8.0-17	---	7.4-8.4	0-2	0	0.0-0.4	0
	9-28	14-25	---	7.9-8.4	1-10	0	0.2-2.0	0
	28-32	---	---	---	---	---	---	---
Rock Outcrop-----	---	---	---	---	---	---	---	---
2436: Zibate-----	0-1	6.0-11	---	7.9-8.4	1-3	0	0.2-1.0	0-5
	1-6	6.0-12	---	7.4-9.0	0-5	0	0.0-2.0	0-5
	6-19	11-22	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	19-23	---	---	---	---	---	---	---
Rock Outcrop-----	---	---	---	---	---	---	---	---
2437: Cruzspring-----	0-1	6.0-11	---	7.9-8.4	1-3	0	0.2-1.0	0-5
	1-3	6.0-11	---	7.9-8.4	1-3	0	0.2-1.0	0-5
	3-10	12-17	---	7.9-8.4	1-5	0	0.2-1.0	0-5
	10-13	---	---	---	---	---	---	---
	13-17	---	---	---	---	---	---	---
Rock Outcrop-----	---	---	---	---	---	---	---	---
2441: Lewdlac-----	0-3	0.0-5.0	---	7.9-8.4	10-30	0	0.0-2.0	0-2
	3-16	5.0-10	---	7.9-9.0	10-30	0	2.0-4.0	0-5
	16-21	---	---	---	---	---	---	---
	21-60	10-25	---	7.9-9.6	5-15	0	0.0-8.0	0-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	7.9-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
2451: Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
Sanwell-----	0-9	3.0-6.0	---	7.9-8.4	1-5	0	0.0-4.0	0-5
	9-16	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	0-5
	16-31	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
	31-60	3.0-6.0	---	8.5-9.0	1-5	0	4.0-8.0	13-30
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
2461: Nowoy-----	0-3	2.0-5.0	---	7.9-8.4	10-25	0	0.0-4.0	0-5
	3-20	3.0-6.0	---	7.9-8.4	25-45	0	0.0-4.0	0-5
	20-60	14-19	---	8.5-9.0	40-60	0	4.0-8.0	5-12
Skelon-----	0-4	3.0-6.0	---	7.9-9.0	5-10	0	0.0-4.0	0-5
	4-28	2.0-6.0	---	7.4-9.0	10-25	0	0.0-4.0	0-5
	28-44	---	---	---	---	---	---	---
	44-52	3.0-6.0	---	8.5-9.0	15-30	0	0.0-4.0	0-5
	52-60	0.0-4.0	---	8.5-9.0	10-20	0	0.0-4.0	0-5
2471: Lewdlac-----	0-3	0.0-5.0	---	7.9-8.4	10-30	0	0.0-2.0	0-2
	3-16	5.0-10	---	7.9-9.0	10-30	0	2.0-4.0	0-5
	16-21	---	---	---	---	---	---	---
	21-60	10-25	---	7.9-9.0	5-15	0	0.0-8.0	0-12
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
2481: Bacho-----	0-3	4.0-11	---	7.9-8.4	1-5	0	0.0-2.0	0-5
	3-11	18-26	---	7.9-8.4	1-10	0	0.0-2.0	0-5
	11-36	---	---	---	---	---	---	---
Greyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
2482: Bacho-----	0-3	4.0-11	---	7.9-8.4	1-5	0	0.0-2.0	0-5
	3-11	18-26	---	7.9-8.4	1-10	0	0.0-2.0	0-5
	11-36	---	---	---	---	---	---	---
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
2491: Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Blacktop-----	0-7	5.0-10	---	7.4-8.4	0	0	0.0-4.0	0-2
	7-17	---	---	---	---	---	---	---
Tokoper-----	0-3	4.0-9.0	---	7.9-8.4	1-20	0	0.0-4.0	0-5
	3-9	10-16	---	7.9-9.0	1-20	0	0.0-4.0	0-5
	9-14	8.0-14	---	7.9-9.0	1-20	0	0.0-8.0	0-12
	14-15	---	---	---	---	---	---	---
	15-25	---	---	---	---	---	---	---
2492: Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---
Silverbow-----	0-2	3.0-9.0	---	7.9-9.0	0-5	0	0.0-4.0	1-12
	2-10	10-19	---	7.9-9.0	3-15	0	0.0-4.0	1-12
	10-18	---	---	---	---	---	---	---
	18-40	---	---	---	---	---	---	---
Rock Outcrop-----	---	---	---	---	---	---	---	---
2493: Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---
Tognoni-----	0-4	5.0-15	---	7.9-9.0	1-15	0	0.0-2.0	0-5
	4-14	20-35	---	7.9-8.4	0	0	0.0-2.0	0-5
	14-24	---	---	---	---	---	---	---
Stonell-----	0-3	3.0-12	---	8.5-9.0	10-15	0	8.0-16.0	0-12
	3-8	10-25	---	7.9-9.0	10-25	0	0.0-2.0	0-2
	8-60	3.0-6.0	---	8.5-9.6	15-30	0	4.0-8.0	0-12
2494: Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---
Vindicator-----	0-2	5.0-15	---	7.4-8.4	1-5	0	0.0-2.0	0-2
	2-7	10-20	---	7.4-8.4	1-5	0	0.0-2.0	0-2
	7-11	---	---	---	---	---	---	---
Stewval-----	0-1	5.0-13	---	7.4-8.4	1-5	0	0	0-2
	1-7	12-20	---	7.4-8.4	1-5	0	0	0-2
	7-11	---	---	---	---	---	---	---
2495: Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---
Gabbvally-----	0-4	5.0-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	4-12	10-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	12-16	---	---	---	---	---	---	---
2496: Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Pintwater-----	0-4	5.0-15	---	7.9-9.0	5-15	0	0.0-2.0	0-5
	4-11	5.0-15	---	7.9-9.0	10-20	0	0.0-4.0	0-5
	11-15	---	---	---	---	---	---	---
Upspring-----	0-2	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0
	2-12	4.0-10	---	7.9-8.4	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---
2500: Commski-----	0-5	5.0-10	---	7.9-9.0	15-30	0	0.0-2.0	1-5
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	0.0-2.0	1-5
	14-60	2.0-8.0	---	7.9-9.0	30-50	0	4.0-8.0	1-12
Greeyeagle-----	0-3	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	3-6	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	6-8	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0-2
	8-24	---	---	---	---	---	---	---
	24-60	3.0-6.0	---	7.9-8.4	0	0	0.0-2.0	0-2
2501: Wanomie-----	0-2	3.0-6.0	---	7.9-9.0	1-5	0	8.0-16.0	13-30
	2-30	3.0-10	---	7.9-9.0	1-5	0	0.0-4.0	13-30
	30-31	---	---	---	---	---	---	---
	31-60	3.0-6.0	---	7.9-9.0	1-5	0	0.0-4.0	5-12
Corbilt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-2.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
2510: Fuegosta-----	0-4	5.0-15	---	8.5-9.0	5-10	0	4.0-8.0	1-12
	4-14	20-40	---	7.9-8.4	1-5	0	0.0-2.0	0-5
	14-18	10-15	---	7.9-8.4	10-25	0	0.0-2.0	0-5
	18-26	---	---	---	---	---	---	---
	26-60	---	---	---	---	---	---	---
Tomel-----	0-3	5.0-15	---	8.5-9.0	0-10	0	0.0-2.0	1-12
	3-19	15-30	---	8.5-9.0	5-20	0	0.0-4.0	1-12
	19-26	---	---	---	---	---	---	---
	26-60	0.0-5.0	---	8.5-9.0	10-20	0	4.0-16.0	5-12
Izo-----	0-9	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	9-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2511: Fuegosta-----	0-4	5.0-15	---	8.5-9.0	5-10	0	4.0-8.0	1-12
	4-14	20-40	---	7.9-8.4	1-5	0	0.0-2.0	0-5
	14-18	10-15	---	7.9-8.4	10-25	0	0.0-2.0	0-5
	18-26	---	---	---	---	---	---	---
	26-60	---	---	---	---	---	---	---
Wardenot-----	0-5	3.0-15	---	7.4-9.0	1-5	0	0.0-4.0	1-12
	5-60	3.0-8.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
Izo-----	0-8	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	8-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2520: Vigus-----	0-7	5.0-15	---	6.6-8.4	0-5	0	0.0-4.0	0-2
	7-13	10-20	---	7.9-9.0	0-5	0	0.0-4.0	1-12
	13-60	5.0-15	---	7.9-9.6	10-20	0	0.0-4.0	13-30

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Fuegosta-----	0-4	5.0-15	---	8.5-9.0	5-10	0	4.0-8.0	1-12
	4-14	20-40	---	7.9-8.4	1-5	0	0.0-2.0	0-5
	14-18	10-15	---	7.9-8.4	10-25	0	0.0-2.0	0-5
	18-26	---	---	---	---	---	---	---
	26-60	---	---	---	---	---	---	---
Izo-----	0-8	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	8-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2521: Vigus-----	0-7	5.0-15	---	6.6-8.4	0-5	0	0.0-4.0	0-2
	7-13	10-20	---	7.9-9.0	0-5	0	0.0-4.0	1-12
	13-60	5.0-15	---	7.9-9.6	10-20	0	0.0-4.0	13-30
Wardenot-----	0-5	3.0-15	---	7.4-9.0	1-5	0	0.0-4.0	1-12
	5-60	3.0-8.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
Fuegosta-----	0-4	5.0-15	---	8.5-9.0	5-10	0	4.0-8.0	1-12
	4-14	20-40	---	7.9-8.4	1-5	0	0.0-2.0	0-5
	14-18	10-15	---	7.9-8.4	10-25	0	0.0-2.0	0-5
	18-26	---	---	---	---	---	---	---
	26-60	---	---	---	---	---	---	---
2531: Laxal-----	0-4	4.0-9.0	---	7.9-9.0	10-25	0	0.0-4.0	0-2
	4-60	3.0-6.0	---	8.5-9.0	10-25	0	4.0-16.0	0-2
Stonell-----	0-3	3.0-12	---	8.5-9.0	10-15	0	8.0-16.0	0-12
	3-8	10-25	---	7.9-9.0	10-25	0	0.0-2.0	0-2
	8-60	3.0-6.0	---	8.5-9.6	15-30	0	4.0-8.0	0-12
Unsel-----	0-7	9.0-13	---	7.9-9.0	0-15	0	0.0-4.0	0-12
	7-11	16-22	---	7.4-9.0	1-15	0	0.0-2.0	1-12
	11-20	5.0-20	---	8.5-9.0	10-20	0	4.0-8.0	1-12
	20-60	0.0-5.0	---	8.5-9.0	10-20	0	4.0-8.0	13-30
2532: Laxal-----	0-4	4.0-9.0	---	7.9-9.0	10-25	0	0.0-4.0	0-2
	4-60	3.0-6.0	---	8.5-9.0	10-25	0	4.0-16.0	0-2
Fang-----	0-3	3.0-10	---	7.4-9.0	0-1	0	0.0-4.0	0-12
	3-42	6.0-10	---	7.4-9.0	1-5	0	0.0-4.0	0-12
	42-64	3.0-6.0	---	7.4-9.0	1-5	0	0.0-4.0	0-12
2540: Lidan-----	0-5	4.0-10	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	5-14	20-29	---	7.4-8.4	0-2	0	0.0-2.0	0-5
	14-30	15-21	---	7.4-8.4	1-5	0	0.0-2.0	0-5
	30-36	---	---	---	---	---	---	---
	36-60	---	---	---	---	---	---	---
Izo-----	0-8	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	8-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2550: Stonewall-----	0-4	4.0-10	---	7.9-8.4	0-5	0	4.0-8.0	5-12
	4-16	18-31	---	7.4-8.4	0-2	0	0.0-2.0	5-12
	16-60	3.0-9.0	---	7.9-8.4	5-15	0	4.0-8.0	5-12
Izo-----	0-3	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	3-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Lidan-----	0-5	4.0-10	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	5-14	20-29	---	7.4-8.4	0-2	0	0.0-2.0	0-5
	14-30	15-21	---	7.4-8.4	1-5	0	0.0-2.0	0-5
	30-36	---	---	---	---	---	---	---
	36-60	---	---	---	---	---	---	---
2570: Stargo-----	0-4	5.0-10	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	4-10	20-25	---	7.9-9.0	0-10	0	2.0-4.0	0-12
	10-60	5.0-10	---	7.9-9.0	0-10	0	2.0-4.0	0-12
Playas-----	0-6	24-35	---	8.5-9.6	1-5	1-5	16.0-32.0	46-90
	6-60	30-60	---	8.5-9.6	1-10	1-10	16.0-32.0	46-90
2580: Wardenot-----	0-5	1.0-5.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
	5-60	3.0-8.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
Izo-----	0-8	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	8-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2601: Cobatus-----	0-2	8.0-14	---	9.1-11.0	5-15	0	8.0-16.0	13-30
	2-14	8.0-14	---	9.1-11.0	5-15	0	4.0-16.0	13-30
	14-60	10-16	---	9.1-11.0	5-15	0-1	4.0-16.0	20-50
Kawich-----	0-2	0.0-8.0	---	8.5-9.6	5-20	0	4.0-8.0	1-12
	2-60	0.0-8.0	---	8.5-9.6	5-20	0	4.0-8.0	1-12
2611: Corbilt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-4.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
2630: Wechech-----	0-2	5.0-10	---	7.9-8.4	30-40	0	0.0-2.0	0-2
	2-7	5.0-10	---	7.9-8.4	30-40	0	0.0-2.0	0-2
	7-60	---	---	---	---	---	---	---
Commski-----	0-5	5.0-10	---	7.9-9.0	15-30	0	0.0-2.0	1-5
	5-14	2.0-8.0	---	7.9-9.0	20-35	0	0.0-2.0	1-5
	14-60	2.0-8.0	---	7.9-9.0	30-50	0	4.0-8.0	1-12
2640: Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---
Advokay-----	0-3	5.0-20	---	7.4-8.4	5-15	0	0.0-2.0	0-5
	3-7	15-30	---	7.4-8.4	10-20	0	0.0-2.0	0-5
	7-11	---	---	---	---	---	---	---
Pintwater-----	0-4	5.0-15	---	7.9-9.0	5-15	0	0.0-2.0	0-5
	4-11	5.0-15	---	7.9-9.0	10-20	0	0.0-4.0	0-5
	11-15	---	---	---	---	---	---	---
2641: Advokay-----	0-3	5.0-20	---	7.4-8.4	5-15	0	0.0-2.0	0-5
	3-7	15-30	---	7.4-8.4	10-20	0	0.0-2.0	0-5
	7-11	---	---	---	---	---	---	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Ardivey-----	0-4	10-20	---	7.9-9.0	0-5	0	0.0-2.0	0-5
	4-14	15-25	---	6.6-8.4	0-10	0	0.0-2.0	0-5
	14-60	5.0-15	---	7.9-9.6	10-30	0	0.0-2.0	1-12
Leo-----	0-4	0.0-3.0	---	7.9-9.0	0-5	0	0.0-2.0	0-2
	4-60	0.0-3.0	---	7.9-9.0	1-10	0	0.0-4.0	0-2
2642: Advokay-----	0-3	5.0-20	---	7.4-8.4	5-15	0	0.0-2.0	0-5
	3-7	15-30	---	7.4-8.4	10-20	0	0.0-2.0	0-5
	7-11	---	---	---	---	---	---	---
Blacktop-----	0-7	5.0-10	---	7.4-8.4	0	0	0.0-4.0	0-2
	7-17	---	---	---	---	---	---	---
2650: Luning-----	0-3	1.0-7.0	---	7.4-9.0	1-10	0	0.0-2.0	1-5
	3-60	1.0-7.0	---	7.9-9.0	1-10	0	0.0-4.0	5-12
Wardenot-----	0-5	3.0-15	---	7.4-9.0	1-5	0	0.0-4.0	1-12
	5-60	3.0-8.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
Izo-----	0-8	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	8-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2660: Stonell-----	0-3	3.0-12	---	8.5-9.0	10-15	0	8.0-16.0	0-12
	3-8	10-25	---	7.9-9.0	10-25	0	0.0-2.0	0-2
	8-60	3.0-6.0	---	8.5-9.6	15-30	0	4.0-8.0	0-12
Wardenot-----	0-5	4.0-10	---	7.4-9.0	1-5	0	0.0-4.0	1-12
	5-60	3.0-8.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
Izo-----	0-8	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	8-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2670: Ardivey-----	0-4	10-20	---	7.9-9.0	0-5	0	0.0-2.0	0-5
	4-14	15-25	---	6.6-8.4	0-10	0	0.0-2.0	0-5
	14-60	5.0-15	---	7.9-9.6	10-30	0	0.0-2.0	1-12
Izo-----	0-8	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	8-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2671: Ardivey-----	0-4	10-20	---	7.9-9.0	0-5	0	0.0-2.0	0-5
	4-14	15-25	---	6.6-8.4	0-10	0	0.0-2.0	0-5
	14-60	5.0-15	---	7.9-9.6	10-30	0	0.0-2.0	1-12
Stonell-----	0-3	3.0-12	---	8.5-9.0	10-15	0	8.0-16.0	0-12
	3-8	10-25	---	7.9-9.0	10-25	0	0.0-2.0	0-2
	8-60	3.0-6.0	---	8.5-9.6	15-30	0	4.0-8.0	0-12
Izo-----	0-8	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	8-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2680: Espint-----	0-1	6.0-18	---	7.4-8.4	0-3	0	0.0-2.0	0-5
	1-7	18-30	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	7-17	---	---	---	---	---	---	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Vindicator-----	0-2	5.0-15	---	7.4-8.4	1-5	0	0.0-2.0	0-2
	2-7	10-20	---	7.4-8.4	1-5	0	0.0-2.0	0-2
	7-17	---	---	---	---	---	---	---
Espint-----	0-1	6.0-18	---	7.4-8.4	0-3	0	0.0-2.0	0-5
	1-7	18-30	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	7-17	---	---	---	---	---	---	---
2681: Espint-----	0-1	6.0-18	---	7.4-8.4	0-3	0	0.0-2.0	0-5
	1-7	18-30	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	7-17	---	---	---	---	---	---	---
Stewval-----	0-1	5.0-13	---	7.4-8.4	1-5	0	0	0-2
	1-7	12-20	---	7.4-8.4	1-5	0	0	0-2
	7-11	---	---	---	---	---	---	---
Vindicator-----	0-2	5.0-15	---	7.4-8.4	1-5	0	0.0-2.0	0-2
	2-7	10-20	---	7.4-8.4	1-5	0	0.0-2.0	0-2
	7-17	---	---	---	---	---	---	---
2682: Espint-----	0-1	6.0-18	---	7.4-8.4	0-3	0	0.0-2.0	0-5
	1-7	18-30	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	7-17	---	---	---	---	---	---	---
Gabbvally-----	0-4	5.0-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	4-12	10-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	12-15	---	---	---	---	---	---	---
Stewval-----	0-1	5.0-13	---	7.4-8.4	1-5	0	0	0-2
	1-7	12-20	---	7.4-8.4	1-5	0	0	0-2
	7-11	---	---	---	---	---	---	---
2690: Leo-----	0-4	0.0-3.0	---	7.9-9.0	0-5	0	0.0-2.0	0-2
	4-60	0.0-3.0	---	7.9-9.0	1-10	0	0.0-4.0	0-2
Izo-----	0-8	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	8-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2701: Cobatus-----	0-2	8.0-14	---	9.1-11.0	5-15	0	8.0-16.0	13-30
	2-14	8.0-14	---	9.1-11.0	5-15	0	4.0-16.0	13-30
	14-60	10-16	---	9.1-11.0	5-15	0-1	4.0-16.0	20-50
2710: Papoose-----	0-6	1.0-5.0	---	7.9-8.4	0-10	0	0.0-2.0	0-5
	6-12	15-25	---	7.4-7.8	0-10	0	0.0-2.0	0-5
	12-25	10-25	---	7.9-8.4	0-10	0	0.0-2.0	0-5
	25-60	2.0-10	---	8.5-9.0	0-10	0	4.0-8.0	5-12
Vindicator-----	0-2	5.0-15	---	7.4-8.4	1-5	0	0.0-2.0	0-2
	2-7	10-20	---	7.4-8.4	1-5	0	0.0-2.0	0-2
	7-17	---	---	---	---	---	---	---
Espint-----	0-1	6.0-18	---	7.4-8.4	0-3	0	0.0-2.0	0-5
	1-7	18-30	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	7-17	---	---	---	---	---	---	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2720:								
Unsel-----	0-7	9.0-13	---	7.9-9.0	0-15	0	0.0-4.0	0-12
	7-11	16-22	---	7.4-9.0	1-15	0	0.0-2.0	1-12
	11-20	5.0-20	---	8.5-9.0	10-20	0	4.0-8.0	1-12
	20-60	0.0-5.0	---	8.5-9.0	10-20	0	4.0-8.0	13-30
Stonell-----	0-3	3.0-12	---	8.5-9.0	10-15	0	8.0-16.0	0-12
	3-8	10-25	---	7.9-9.0	10-25	0	0.0-2.0	0-2
	8-60	3.0-6.0	---	8.5-9.6	15-30	0	4.0-8.0	0-12
Veet-----	0-5	5.0-15	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	5-20	5.0-15	---	7.4-9.0	0-5	0	0.0-2.0	0-5
	20-60	2.0-8.0	---	7.9-9.0	10-20	0	0.0-2.0	0-5
2730:								
Gabbvally-----	0-4	5.0-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	4-12	10-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	12-15	---	---	---	---	---	---	---
Blacktop-----	0-7	5.0-10	---	7.4-8.4	0	0	0.0-4.0	0-2
	7-17	---	---	---	---	---	---	---
Espint-----	0-1	6.0-18	---	7.4-8.4	0-3	0	0.0-2.0	0-5
	1-7	18-30	---	7.4-8.4	0-5	0	0.0-2.0	0-5
	7-17	---	---	---	---	---	---	---
2731:								
Gabbvally-----	0-4	5.0-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	4-12	10-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	12-15	---	---	---	---	---	---	---
Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---
Vindicator-----	0-2	5.0-15	---	7.4-8.4	1-5	0	0.0-2.0	0-2
	2-7	10-20	---	7.4-8.4	1-5	0	0.0-2.0	0-2
	7-11	---	---	---	---	---	---	---
2732:								
Gabbvally-----	0-4	5.0-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	4-12	10-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	12-15	---	---	---	---	---	---	---
Tognoni-----	0-4	3.0-9.0	---	7.9-9.0	1-5	0	0.0-2.0	0-2
	4-14	18-24	---	7.9-8.4	0-1	0	0.0-2.0	0-2
	14-24	---	---	---	---	---	---	---
Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---
2734:								
Gabbvally-----	0-4	5.0-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	4-12	10-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	12-15	---	---	---	---	---	---	---
Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2735:								
Gabbvally-----	0-4	5.0-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	4-12	10-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	12-15	---	---	---	---	---	---	---
Wahguyhe-----	0-2	2.0-12	---	7.9-8.4	0-2	0	0.0-2.0	0-5
	2-16	2.0-12	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	16-20	---	---	---	---	---	---	---
Rock Outcrop-----	---	---	---	---	---	---	---	---
2736:								
Gabbvally-----	0-4	5.0-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	4-12	10-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	12-15	---	---	---	---	---	---	---
Brier-----	0-4	10-30	---	6.6-7.8	0	0	0.0-2.0	0-2
	4-15	15-35	---	6.6-7.8	0	0	0.0-2.0	0-2
	15-19	---	---	---	---	---	---	---
Rock Outcrop-----	---	---	---	---	---	---	---	---
2740:								
Tognoni-----	0-4	3.0-9.0	---	7.9-9.0	1-5	0	0.0-2.0	0-2
	4-14	18-24	---	7.9-8.4	0-1	0	0.0-2.0	0-2
	14-24	---	---	---	---	---	---	---
Blacktop-----	0-7	5.0-20	---	6.6-7.8	0	0	0.0-2.0	0-5
	7-17	---	---	---	---	---	---	---
2741:								
Blacktop-----	0-7	5.0-10	---	7.4-8.4	0	0	0.0-4.0	0-2
	7-17	---	---	---	---	---	---	---
Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---
Tognoni-----	0-4	5.0-15	---	7.9-9.0	1-15	0	0.0-2.0	0-5
	4-14	20-35	---	7.9-8.4	0	0	0.0-2.0	0-5
	14-24	---	---	---	---	---	---	---
2750:								
Silverbow-----	0-2	3.0-9.0	---	7.9-9.0	0-5	0	0.0-4.0	1-12
	2-10	10-19	---	7.9-9.0	3-15	0	0.0-4.0	1-12
	10-18	---	---	---	---	---	---	---
	18-40	---	---	---	---	---	---	---
Wardenot-----	0-5	1.0-5.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
	5-60	3.0-8.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
Izo-----	0-8	0.0-8.0	---	7.9-9.0	1-10	0	0.0-2.0	0-5
	8-60	0.0-8.0	---	7.9-9.0	5-20	0	0.0-4.0	0-5
2760:								
Downeyville-----	0-4	5.0-15	---	7.9-8.4	0-5	0	0.0-2.0	0-5
	4-9	10-25	---	7.9-9.0	0-10	0	0.0-2.0	0-5
	9-13	---	---	---	---	---	---	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Unsel-----	0-7	9.0-13	---	7.9-9.0	0-15	0	0.0-4.0	0-12
	7-11	16-22	---	7.4-9.0	1-15	0	0.0-2.0	1-12
	11-20	5.0-20	---	8.5-9.0	10-20	0	4.0-8.0	1-12
	20-60	0.0-5.0	---	8.5-9.0	10-20	0	4.0-8.0	13-30
Tokoper-----	0-3	4.0-9.0	---	7.9-8.4	1-20	0	0.0-4.0	0-5
	3-9	10-16	---	7.9-9.0	1-20	0	0.0-4.0	0-5
	9-14	8.0-14	---	7.9-9.0	1-20	0	0.0-8.0	0-12
	14-15	---	---	---	---	---	---	---
	15-25	---	---	---	---	---	---	---
2770: Bullfor-----	0-1	1.0-4.0	---	7.9-8.4	0-2	0	0.0-4.0	0-5
	1-24	1.0-4.0	---	7.9-8.4	0-5	0	0.0-4.0	0-5
	24-25	---	---	---	---	---	---	---
	25-60	2.0-5.0	---	8.5-9.0	1-10	0	0.0-4.0	0-5
Panor-----	0-1	5.0-11	---	8.5-9.0	1-10	0	8.0-16.0	13-30
	1-5	5.0-11	---	8.5-9.0	5-10	0	8.0-16.0	13-30
	5-23	14-19	---	8.5-9.0	5-10	0-2	16.0-32.0	13-45
	23-60	14-19	---	8.5-9.0	5-10	0-1	16.0-32.0	13-45
Bluepoint-----	0-9	1.0-5.0	---	7.4-9.0	1-10	0	0.0-2.0	1-5
	9-17	1.0-5.0	---	7.9-9.0	1-10	0	0.0-2.0	1-5
	17-41	1.0-5.0	---	7.9-9.0	1-10	0-1	0.0-4.0	1-12
	41-60	1.0-5.0	---	7.9-9.0	0-15	0-1	0.0-4.0	1-12
2781: Haymont-----	0-6	3.0-9.0	---	7.9-9.0	10-30	0	0.0-4.0	5-12
	6-40	3.0-10	---	7.9-9.0	10-30	1-3	4.0-16.0	31-45
	40-60	3.0-11	---	7.9-9.0	10-30	1-3	4.0-16.0	31-45
Bluepoint-----	0-9	1.0-5.0	---	7.4-9.0	1-10	0	0.0-2.0	1-5
	9-17	1.0-5.0	---	7.9-9.0	1-10	0	0.0-2.0	1-5
	17-41	1.0-5.0	---	7.9-9.0	1-10	0-1	0.0-4.0	1-12
	41-60	1.0-5.0	---	7.9-9.0	0-15	0-1	0.0-4.0	1-12
Panor-----	0-1	5.0-11	---	8.5-9.0	1-10	0	8.0-16.0	13-30
	1-5	5.0-11	---	8.5-9.0	5-10	0	8.0-16.0	13-30
	5-23	14-19	---	8.5-9.0	5-10	0-2	16.0-32.0	13-45
	23-60	14-19	---	8.5-9.0	5-10	0-1	16.0-32.0	13-45
2810: Ashmed, moist-----	0-4	3.0-9.0	---	9.1-11.0	5-10	0	4.0-8.0	13-30
	4-7	5.0-9.0	---	9.1-11.0	5-15	0	16.0-32.0	31-45
	7-24	13-19	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	24-32	3.0-9.0	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	32-60	3.0-9.0	---	9.1-11.0	5-10	0	8.0-16.0	13-35
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Niavi-----	0-2	7.0-14	---	7.9-8.4	1-3	0	0.0-2.0	0-5
	2-8	6.0-14	---	7.9-8.4	1-3	0	0.0-2.0	0-5
	8-29	2.0-6.0	---	7.9-8.4	3-12	0	0.0-2.0	0-5
	29-60	2.0-6.0	---	7.9-8.4	5-12	0	0.0-4.0	0-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2820:								
Strozi-----	0-5	3.0-9.0	---	7.9-8.4	0-1	0	4.0-8.0	5-12
	5-13	14-19	---	7.9-8.4	0-1	0	4.0-8.0	5-12
	13-32	3.0-6.0	---	7.9-9.0	5-10	0	4.0-8.0	5-12
	32-33	---	---	---	---	---	---	---
	33-60	3.0-6.0	---	7.9-9.0	5-15	0	4.0-8.0	5-12
Corbilt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-2.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
2840:								
Armpup-----	0-3	3.0-6.0	---	9.1-9.6	5-15	0	16.0-32.0	13-30
	3-18	18-24	---	9.1-9.6	5-15	0	16.0-32.0	30-45
	18-46	18-24	---	9.1-9.6	15-25	0	8.0-32.0	13-45
	46-55	3.0-6.0	---	9.1-9.6	10-20	0	8.0-16.0	10-13
	55-59	---	---	---	---	---	---	---
Strozi-----	0-5	3.0-9.0	---	7.9-8.4	0-1	0	4.0-8.0	10-13
	5-13	14-19	---	7.9-8.4	0-1	0	4.0-8.0	10-13
	13-32	3.0-6.0	---	7.9-9.0	5-10	0	4.0-8.0	10-13
	32-33	---	---	---	---	---	---	---
	33-60	3.0-6.0	---	7.9-9.0	5-15	0	4.0-8.0	10-13
2850:								
Scottcas-----	0-2	3.0-10	---	7.9-8.4	1-10	0	0.0-4.0	0-2
	2-7	10-20	---	7.9-8.4	1-10	0	0.0-4.0	0-2
	7-15	3.0-10	---	8.5-9.0	10-20	0	4.0-8.0	1-12
	15-21	2.0-8.0	---	8.5-9.6	10-20	0	4.0-8.0	1-12
	21-60	2.0-8.0	---	8.5-9.6	10-20	0	4.0-8.0	0-12
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
2860:								
Sezna-----	0-3	3.0-9.0	---	7.9-9.0	10-20	0	0.0-4.0	0-5
	3-18	13-19	---	7.9-9.0	10-20	0	0.0-4.0	0-5
	18-60	---	---	---	---	---	---	---
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
2870:								
Kanackey-----	0-3	8.0-11	---	7.9-9.0	2-10	0	0.0-2.0	0-2
	3-7	20-31	---	7.4-8.4	0-2	0	0.0-2.0	0-2
	7-14	20-31	---	7.4-8.4	0-2	0	0.0-2.0	0-2
	14-24	---	---	---	---	---	---	---
2880:								
Bacho-----	0-3	4.0-11	---	7.9-8.4	1-5	0	0.0-2.0	0-5
	3-11	18-26	---	7.9-8.4	1-10	0	0.0-2.0	0-5
	11-36	---	---	---	---	---	---	---
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
Arizo-----	0-8	1.0-5.0	---	7.4-9.0	0-5	0	0.0-2.0	1-12
	8-60	1.0-5.0	---	7.4-9.0	1-5	0	0.0-2.0	1-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2890:								
Nopah-----	0-6	5.0-11	---	7.9-9.6	30-50	0	0.0-2.0	0-2
	6-60	10-19	---	8.5-9.6	40-65	0	2.0-16.0	0-12
Woda-----	0-1	3.0-7.0	---	7.9-8.4	40-60	0	4.0-8.0	5-12
	1-10	3.0-7.0	---	7.9-8.4	40-60	0	4.0-8.0	5-12
	10-18	15-20	---	8.5-9.0	40-60	0	4.0-8.0	5-12
	18-60	---	---	---	---	---	---	---
Gullied Land-----	0-60	---	---	---	---	---	0	---
2900:								
Playas-----	0-6	35-65	---	8.5-9.6	1-5	1-5	16.0-32.0	46-90
	6-60	30-60	---	8.5-9.6	1-10	1-10	16.0-32.0	46-90
2901:								
Playas-----	0-6	24-35	---	8.5-9.6	1-5	1-5	16.0-32.0	46-90
	6-60	30-60	---	8.5-9.6	1-10	1-10	16.0-32.0	46-90
Corbilt-----	0-4	3.0-7.0	---	7.9-8.4	15-20	0	0.0-2.0	1-5
	4-32	1.0-5.0	---	7.9-9.6	15-20	0	0.0-2.0	1-5
	32-56	1.0-5.0	---	8.5-9.6	10-20	0	0.0-2.0	1-12
	56-60	---	---	---	---	---	---	---
Bluepoint-----	0-9	1.0-5.0	---	7.4-9.0	1-10	0	0.0-2.0	1-5
	9-17	1.0-5.0	---	7.9-9.0	1-10	0	0.0-2.0	1-5
	17-41	1.0-5.0	---	7.9-9.0	1-10	0-1	0.0-4.0	1-12
	41-60	1.0-5.0	---	7.9-9.0	0-15	0-1	0.0-4.0	1-12
2903:								
Playas-----	0-6	24-35	---	8.5-9.6	1-5	1-5	16.0-32.0	46-90
	6-60	30-60	---	8.5-9.6	1-10	1-10	16.0-32.0	46-90
Mobl-----	0-2	3.0-10	---	8.5-9.0	2-5	0	16.0-32.0	31-45
	2-7	15-25	---	8.5-9.6	2-5	0	16.0-32.0	31-45
	7-17	3.0-10	---	8.5-9.6	2-5	0	16.0-32.0	31-45
	17-60	3.0-10	---	8.5-9.6	2-5	0	16.0-32.0	13-30
Kawich-----	0-2	0.0-8.0	---	8.5-9.6	5-20	0	4.0-8.0	1-12
	2-60	0.0-8.0	---	8.5-9.6	5-20	0	4.0-8.0	1-12
2910:								
Dune Land-----	0-6	0.0-1.0	---	7.4-8.4	0	0	0	0
	6-60	0.0-1.0	---	7.4-8.4	0	0	0	0
2920:								
Dumps-----	---	---	---	---	---	---	---	---
2930:								
Seralin-----	0-2	6.0-13	---	7.9-8.4	0	0	2.0-4.0	1-5
	2-7	6.0-13	---	7.9-8.4	0	0	2.0-4.0	1-5
	7-14	4.0-10	---	7.9-8.4	1-5	0	4.0-8.0	1-5
	14-18	---	---	---	---	---	---	---
Rock Outcrop-----	---	---	---	---	---	---	---	---
Sed-----	0-7	6.0-12	---	7.4-8.4	0	0	0	0
	7-20	11-17	---	7.9-8.4	0	0	0	0
	20-24	10-16	---	7.9-8.4	0	0	0.0-2.0	0-2
	24-34	---	---	---	---	---	---	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2940:								
Schader-----	0-2	7.0-14	---	7.4-8.4	0-2	0	0.0-0.4	0
	2-9	8.0-17	---	7.4-8.4	0-2	0	0.0-0.4	0
	9-28	14-25	---	7.9-8.4	1-10	0	0.2-2.0	0
	28-32	---	---	---	---	---	---	---
Sed-----	0-7	6.0-12	---	7.4-8.4	0	0	0	0
	7-20	11-17	---	7.9-8.4	0	0	0	0
	20-24	10-16	---	7.9-8.4	0	0	0.0-2.0	0-2
	24-34	---	---	---	---	---	---	---
Cruzspring-----	0-1	6.0-11	---	7.9-8.4	1-3	0	0.2-1.0	0-5
	1-3	6.0-11	---	7.9-8.4	1-3	0	0.2-1.0	0-5
	3-10	12-17	---	7.9-8.4	1-5	0	0.2-1.0	0-5
	10-13	---	---	---	---	---	---	---
	13-17	---	---	---	---	---	---	---
2950:								
Pits-----	---	---	---	---	---	---	---	---
2951:								
Pits-----	---	---	---	---	---	---	---	---
2960:								
Tomel-----	0-3	5.0-15	---	8.5-9.0	0-10	0	0.0-2.0	1-12
	3-19	15-30	---	8.5-9.0	5-20	0	0.0-4.0	1-12
	19-26	---	---	---	---	---	---	---
	26-60	0.0-5.0	---	8.5-9.0	10-20	0	4.0-16.0	5-12
Ardivey-----	0-4	10-20	---	7.9-9.0	0-5	0	0.0-2.0	0-5
	4-14	15-25	---	6.6-8.4	0-10	0	0.0-2.0	0-5
	14-60	5.0-15	---	7.9-9.6	10-30	0	0.0-2.0	1-12
Wardenot-----	0-5	1.0-5.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
	5-60	3.0-8.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
2961:								
Tomel-----	0-3	5.0-15	---	8.5-9.0	0-10	0	0.0-2.0	1-12
	3-19	15-30	---	8.5-9.0	5-20	0	0.0-4.0	1-12
	19-26	---	---	---	---	---	---	---
	26-60	0.0-5.0	---	8.5-9.0	10-20	0	4.0-16.0	5-12
Breko-----	0-6	5.0-20	---	7.9-9.0	0-5	0	0.0-2.0	0-2
	6-21	15-30	---	7.9-9.0	5-20	0	0.0-2.0	0-2
	21-29	15-30	---	7.9-9.0	10-30	0	0.0-2.0	0-2
	29-60	5.0-15	---	7.9-9.0	10-30	0	0.0-2.0	0-2
Wardenot-----	0-5	3.0-15	---	7.4-9.0	1-5	0	0.0-4.0	1-12
	5-60	3.0-8.0	---	7.4-9.0	1-5	0	0.0-4.0	1-12
2970:								
Destazo-----	0-11	14-19	---	7.9-8.4	25-40	0	0.0-4.0	0-5
	11-52	10-19	---	7.9-8.4	40-65	0	0.0-4.0	0-5
	52-60	14-19	---	7.9-8.4	40-60	0	0.0-4.0	0-5
Nowoy-----	0-3	2.0-5.0	---	7.9-8.4	10-25	0	0.0-4.0	0-5
	3-20	3.0-6.0	---	7.9-8.4	25-45	0	0.0-4.0	0-5
	20-60	14-19	---	8.5-9.0	40-60	0	4.0-8.0	5-12
Gullied Land-----	0-60	---	---	---	---	---	0	---

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
2971: Upspring-----	0-2	5.0-10	---	7.9-8.4	0	0	0.0-2.0	0
	2-12	4.0-10	---	7.9-8.4	0	0	0.0-2.0	0
	12-22	---	---	---	---	---	---	---
2990: Lealandic-----	0-5	4.0-11	---	7.9-9.0	1-5	0	0.0-2.0	0-5
	5-12	18-26	---	7.9-9.0	0-5	0	0.0-4.0	0-12
	12-23	18-26	---	7.9-9.0	1-10	0	0.0-4.0	0-12
	23-40	---	---	---	---	---	---	---
Ashmed-----	0-4	3.0-9.0	---	9.1-11.0	5-10	0	4.0-8.0	13-30
	4-7	5.0-9.0	---	9.1-11.0	5-15	0	16.0-32.0	30-45
	7-24	13-19	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	24-32	3.0-9.0	---	9.1-11.0	15-25	0	8.0-16.0	13-35
	32-60	3.0-9.0	---	9.1-11.0	5-10	0	8.0-16.0	13-35
3021: Casaga-----	0-1	5.0-10	---	8.5-9.6	10-15	0	8.0-16.0	46-90
	1-21	14-19	---	7.9-9.6	10-25	0-1	8.0-16.0	13-45
	21-41	14-19	---	8.5-9.6	10-25	0-1	8.0-16.0	13-45
	41-60	4.0-10	---	7.4-8.4	15-30	2-10	8.0-16.0	13-30
Destazo-----	0-11	14-19	---	7.9-8.4	25-40	0	0.0-4.0	0-5
	11-52	10-19	---	7.9-8.4	40-65	0	0.0-4.0	0-5
	52-60	14-19	---	7.9-8.4	40-60	0	0.0-4.0	0-5
Yurm-----	0-3	5.0-11	---	7.9-8.4	10-15	0	4.0-8.0	5-12
	3-16	3.0-10	---	7.9-9.0	15-30	0	4.0-8.0	5-12
	16-60	---	---	---	---	---	---	---
3022: Casaga-----	0-1	15-20	---	8.5-9.0	10-15	0	16.0-32.0	46-90
	1-21	20-25	---	8.5-9.6	10-25	0-5	8.0-16.0	31-45
	21-41	20-25	---	7.9-9.0	10-25	0-5	8.0-16.0	31-45
	41-60	6.0-15	---	7.4-9.0	15-30	2-10	8.0-16.0	13-30
Woda-----	0-1	3.0-7.0	---	7.9-8.4	40-60	0	4.0-8.0	5-12
	1-10	3.0-7.0	---	7.9-8.4	40-60	0	4.0-8.0	5-12
	10-18	15-20	---	8.5-9.0	40-60	0	4.0-8.0	5-12
	18-28	---	---	---	---	---	---	---
Yermo-----	0-6	5.0-15	---	7.9-9.0	1-10	0	0.0-4.0	0-2
	6-60	5.0-15	---	7.9-9.0	5-15	0	0.0-4.0	1-12
3052: Bobnbob-----	0-7	15-22	---	8.5-9.6	15-40	0	4.0-8.0	5-12
	7-29	14-19	---	8.5-9.6	20-40	0	4.0-8.0	5-12
	29-38	10-21	---	8.5-9.6	20-40	0	4.0-8.0	5-12
	38-52	14-19	---	8.5-9.6	25-40	0-1	0.0-4.0	0-5
	52-60	5.0-11	---	8.5-9.0	40-60	0-1	0.0-4.0	0-5
Caslo-----	0-1	20-32	---	9.1-9.6	40-55	0	16.0-32.0	13-30
	1-10	20-31	---	8.5-9.6	40-60	2-5	4.0-16.0	1-12
	10-60	14-19	---	8.5-9.6	40-60	0-1	2.0-16.0	5-30
3101: Bluepoint-----	0-9	1.0-5.0	---	7.4-9.0	1-10	0	0.0-2.0	1-5
	9-17	1.0-5.0	---	7.9-9.0	1-10	0	0.0-2.0	1-5
	17-41	1.0-5.0	---	7.9-9.0	1-10	0-1	0.0-4.0	1-12
	41-60	1.0-5.0	---	7.9-9.0	0-15	0-1	0.0-4.0	1-12

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbon- ate	Gypsum	Salinity	Sodium adsorp- tion ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Besherm-----	0-2	14-21	---	8.5-9.0	25-40	0	8.0-16.0	13-30
	2-11	20-31	---	8.5-9.0	30-50	0-2	8.0-16.0	5-12
	11-60	18-26	---	7.9-9.0	40-60	0-1	4.0-16.0	5-12
3120: Nowoy-----	0-3	2.0-5.0	---	7.9-8.4	10-25	0	0.0-4.0	0-5
	3-20	3.0-6.0	---	7.9-8.4	25-45	0	0.0-4.0	0-5
	20-60	14-19	---	8.5-9.0	40-60	0	4.0-8.0	5-12
Tanazza-----	0-2	3.0-9.0	---	7.9-9.0	20-40	0-1	0.0-4.0	0-5
	2-15	8.0-14	---	7.9-9.0	35-50	0-1	0.0-4.0	0-5
	15-45	13-19	---	7.9-9.0	40-70	15-40	0.0-4.0	0-5
	45-60	---	---	---	---	40-60	---	---
Yurm-----	0-3	4.0-11	---	7.9-8.4	10-15	0	4.0-8.0	5-12
	3-16	3.0-10	---	7.9-9.0	15-30	0	4.0-8.0	5-12
	16-60	---	---	---	---	---	---	---
3150: Casaga-----	0-1	5.0-10	---	8.5-9.6	10-15	0	8.0-16.0	46-90
	1-21	14-19	---	7.9-9.6	10-25	0-1	8.0-16.0	31-45
	21-41	14-19	---	8.5-9.6	10-25	0-1	8.0-16.0	31-45
	41-60	4.0-10	---	7.4-8.4	15-30	2-10	8.0-16.0	13-30
3230: Alko-----	0-5	3.0-6.0	---	9.1-11.0	1-5	0	16.0-32.0	46-99
	5-11	5.0-10	---	7.9-9.0	2-5	0	0.0-4.0	46-99
	11-33	---	---	---	---	---	---	---
	33-60	0.0-6.0	---	8.5-9.0	2-5	0	0.0-4.0	46-99
Casaga-----	0-1	15-20	---	8.5-9.0	10-15	0	16.0-32.0	46-90
	1-21	20-25	---	8.5-9.6	10-25	0-5	8.0-16.0	31-45
	21-41	20-25	---	7.9-9.0	10-25	0-5	8.0-16.0	31-45
	41-60	6.0-15	---	7.4-9.0	15-30	2-10	8.0-16.0	13-30
3252: Bobnbob-----	0-7	5.0-12	---	8.5-9.0	15-40	0	4.0-8.0	6-12
	7-29	14-19	---	8.5-9.0	20-40	0	4.0-8.0	6-12
	29-38	10-21	---	8.5-9.0	20-40	0	4.0-8.0	0-5
	38-52	14-19	---	8.5-9.0	25-40	0-1	0.0-4.0	0-5
	52-60	5.0-11	---	8.5-9.0	40-60	0-1	0.0-4.0	0-5
Cobatus-----	0-2	8.0-14	---	9.1-11.0	5-15	0	8.0-16.0	13-30
	2-14	8.0-14	---	9.1-11.0	5-15	0	4.0-16.0	13-30
	14-60	10-16	---	9.1-11.0	5-15	0-1	4.0-16.0	13-30
3302: Rumpah-----	0-3	20-31	---	7.9-9.0	20-40	0	0.0-4.0	0-5
	3-54	23-31	---	7.9-9.0	20-40	0-1	2.0-16.0	13-30
	54-60	20-31	---	8.5-9.0	40-60	0-1	2.0-4.0	5-12
3313: Besherm-----	0-2	14-21	---	8.5-9.0	25-40	0	8.0-16.0	13-30
	2-11	20-31	---	8.5-9.0	30-50	0-2	8.0-16.0	5-12
	11-60	18-26	---	7.9-9.0	40-60	0-1	4.0-16.0	5-12
3320: Haymont-----	0-3	3.0-9.0	---	7.9-9.0	10-30	0	0.0-4.0	5-12
	3-40	3.0-10	---	7.9-9.0	10-30	1-3	4.0-16.0	31-45
	40-60	3.0-11	---	7.9-9.0	10-30	1-3	4.0-16.0	31-45

TABLE 13.--CHEMICAL PROPERTIES OF THE SOILS--Continued

[illegible]

TABLE 14.--WATER FEATURES

(Depths of layers are in feet. See text for definitions of terms used in this table. Estimates of the frequency of ponding and flooding apply to the whole year rather than to individual months. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
1314: Weiser-----	B	Jan-Dec	---	---	---	---	None	---	None
Wechech-----	D	Jan-Dec	---	---	---	---	None	---	None
1315: Lastchance-----	C	Jan-Dec	---	---	---	---	None	---	None
Lastchance, upper elevation fans-----	C	Jan-Dec	---	---	---	---	None	---	None
Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
1316: Lastchance-----	C	Jan-Dec	---	---	---	---	None	---	None
Ferrogold-----	D	Jan-Dec	---	---	---	---	None	---	None
Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
1317: Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
Lastchance-----	C	Jan-Dec	---	---	---	---	None	---	None
1320: Boxspring-----	D	Jan-Dec	---	---	---	---	None	---	None
Zeheme-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
1321: Boxspring-----	D	Jan-Dec	---	---	---	---	None	---	None
Seralin-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
1340: Longjim-----	D	Jan-Dec	---	---	---	---	None	---	None
Niavi-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
1871: Irongold-----	D	Jan-Dec	---	---	---	---	None	---	None
Irongold-----	D	Jan-Dec	---	---	---	---	None	---	None
Weiser-----	B	Jan-Dec	---	---	---	---	None	---	None
2002: Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
Upspring-----	D	Jan-Dec	---	---	---	---	None	---	None
Rubble Land-----	A	Jan-Dec	---	---	---	---	None	---	None
2004: Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
Zyplar-----	D	Jan-Dec	---	---	---	---	None	---	None
2005: Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
St. Thomas-----	D	Jan-Dec	---	---	---	---	None	---	None
St. Thomas-----	D	Jan-Dec	---	---	---	---	None	---	None
2010: Longjim-----	D	Jan-Dec	---	---	---	---	None	---	None
2011: Sanwell-----	B	Jan-Dec	---	---	---	---	None	---	None
Sanwell-----	B	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Surface water depth	Ponding		Flooding	
			Upper limit	Lower limit		Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2012:									
Zalda-----	D	Jan-Dec	---	---	---	---	None	---	None
Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
Upspring-----	D	Jan-Dec	---	---	---	---	None	---	None
2013:									
Longjim-----	D	Jan-Dec	---	---	---	---	None	---	None
Yurm-----	D	Jan-Dec	---	---	---	---	None	---	None
2020:									
Weiser-----	B	Jan-Dec	---	---	---	---	None	---	None
Canoto-----	B	Jan-Dec	---	---	---	---	None	---	None
2021:									
Weiser-----	B	Jan-Dec	---	---	---	---	None	---	None
Nickel-----	B	Jan-Dec	---	---	---	---	None	---	None
2023:									
Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
Sezna-----	D	Jan-Dec	---	---	---	---	None	---	None
2030:									
Corbilt-----	B	Jan-Dec	---	---	---	---	None	---	None
2031:									
Corbilt-----	B	Jan-Dec	---	---	---	---	None	---	None
Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
2040:									
Yurm-----	D	Jan-Dec	---	---	---	---	None	---	None
Canoto-----	B	Jan-Dec	---	---	---	---	None	---	None
Yurm, moist-----	D								

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
2050: Canoto-----	B	Jan-Dec	---	---	---	---	None	---	None
		Jan-Dec	---	---	---	---	None	---	None
Naye-----	C	Jan-Dec	---	---	---	---	None	---	None
		Jan-Dec	---	---	---	---	None	---	None
2051: Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
		Jan-Dec	---	---	---	---	None	---	None
Woda-----	D	Jan-Dec	---	---	---	---	None	---	None
		Jan-Dec	---	---	---	---	None	---	None
Nowoy-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2052: Canoto-----	B	Jan-Dec	---	---	---	---	None	---	None
		Jan-Dec	---	---	---	---	None	---	None
2053: Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
		Jan-Dec	---	---	---	---	None	---	None
Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
		Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2054: Yermo, hot-----	B	Jan-Dec	---	---	---	---	None	---	None
		Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
		Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2055: Canoto-----	B	Jan-Dec	---	---	---	---	None	---	None
Canoto, MOIST-----	B	Jan-Dec	---	---	---	---	None	---	None
2057: Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
2058: Canoto-----	B	Jan-Dec	---	---	---	---	None	---	None
Nickel-----	B	Jan-Dec	---	---	---	---	None	---	None
2060: Purob-----	D	Jan-Dec	---	---	---	---	None	---	None
Irongold-----	D	Jan-Dec	---	---	---	---	None	---	None
2061: Vace-----	D	Jan-Dec	---	---	---	---	None	---	None
2062: Purob-----	D	Jan-Dec	---	---	---	---	None	---	None
Niavi-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2064: Longjim, summer precip.---	D	Jan-Dec	---	---	---	---	None	---	None
Purob-----	D	Jan-Dec	---	---	---	---	None	---	None
Niavi-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2070: Shamock-----	C	Jan-Dec	---	---	---	---	None	---	None
2071: Shamock-----	C	Jan-Dec	---	---	---	---	None	---	None
Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
2080: St. Thomas-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
2081: St. Thomas-----	D	Jan-Dec	---	---	---	---	None	---	None
Tecopa-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2090: Breko-----	B	Jan-Dec	---	---	---	---	None	---	None
Veet-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2110: Pahrump-----	C	Jan-Dec	---	---	---	---	None	---	None
2121: Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
2131: Upspring-----	D	Jan-Dec	---	---	---	---	None	---	None
Shorim-----	C	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2140: Jonnic-----	C	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Surface water depth	Ponding		Flooding	
			Upper limit	Lower limit		Duration	Frequency	Duration	Frequency
Niavi-----	B		Ft	Ft	Ft				
		January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2151: Arizo-----	A								
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
Bluepoint-----	A								
		Jan-Dec	---	---	---	---	None	---	None
Dune Land-----	A								
		Jan-Dec	---	---	---	---	None	---	None
2152: Arizo-----	A								
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
2153: Arizo-----	A								
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
Corbilt-----	B								
		Jan-Dec	---	---	---	---	None	---	None
Commski-----	B								
		Jan-Dec	---	---	---	---	None	---	None
2161: Casaga-----	C								
		January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
Nowoy-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2162: Casaga-----	C	Jan-Dec	---	---	---	---	None	---	None
Panor-----		Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
2171: Sanwell-----		Jan-Dec	---	---	---	---	None	---	None
Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
2172: Sanwell-----		Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
2181: Skelon-----		Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Pinez-----		Jan-Dec	---	---	---	---	None	---	None
2184: Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
Bullfor-----		Jan-Dec	---	---	---	---	None	---	None
2185: Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
Yermo-----		Jan-Dec	---	---	---	---	None	---	None
Ashmed-----	B								

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
		Jan-Dec	---	---	---	---	None	---	None
2186: Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
Pinez-----	B	Jan-Dec	---	---	---	---	None	---	None
2191: Pinez-----	B	Jan-Dec	---	---	---	---	None	---	None
Lealandic-----	D	Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2201: Corbilt-----	B	Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2202: Corbilt-----	B	Jan-Dec	---	---	---	---	None	---	None
Migern-----	B	Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2204: Corbilt-----	B	Jan-Dec	---	---	---	---	None	---	None
Wodavar-----	D	Jan-Dec	---	---	---	---	None	---	None
Sanwell-----	B	Jan-Dec	---	---	---	---	None	---	None
2212: Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Bullfor-----	C	Jan-Dec	---	---	---	---	None	---	None
2214: Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
2215: Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
2216: Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2218: Sanwell-----	B	Jan-Dec	---	---	---	---	None	---	None
Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
2220: Canoto-----	B	Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2221: Sanwell-----	B	Jan-Dec	---	---	---	---	None	---	None
Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
2222: Niavi-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Jonnic-----	C	Jan-Dec	---	---	---	---	None	---	None
2230: Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
2233: Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
Bluepoint-----	A	Jan-Dec	---	---	---	---	None	---	None
2250: Tokoper-----	D	Jan-Dec	---	---	---	---	None	---	None
Upspring-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2251: Tokoper-----	D	Jan-Dec	---	---	---	---	None	---	None
Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Pintwater-----	D	Jan-Dec	---	---	---	---	None	---	None
2252: Tokoper-----	D	Jan-Dec	---	---	---	---	None	---	None
Blacktop-----	D	Jan-Dec	---	---	---	---	None	---	None
2253: Tokoper-----	D	Jan-Dec	---	---	---	---	None	---	None
Ardivey-----	B	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2254: Tokoper-----	D	Jan-Dec	---	---	---	---	None	---	None
Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Espint-----	D	Jan-Dec	---	---	---	---	None	---	None
2260: Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
2261: Longjim-----	D	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Dedas-----	D	Jan-Dec	---	---	---	---	None	---	None
2263: Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
Sanwell-----	B	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
2266: Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
2267: Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
2268: Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
2269: Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Strozi-----	C	Jan-Dec	---	---	---	---	None	---	None
2270: Bluepoint-----	A	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2271: Kawich-----	A	Jan-Dec	---	---	---	---	None	---	None
Corbilt-----	B	Jan-Dec	---	---	---	---	None	---	None
Wanomie-----	C	Jan-Dec	---	---	---	---	None	---	None
2280: Shorim-----	C	Jan-Dec	---	---	---	---	None	---	None
Zalda-----	D	Jan-Dec	---	---	---	---	None	---	None
Upspring-----	D	Jan-Dec	---	---	---	---	None	---	None
2281: Shorim-----	C	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
2282: Dedas-----	D	Jan-Dec	---	---	---	---	None	---	None
Orwash-----	A	Jan-Dec	---	---	---	---	None	---	None
2290: Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
Upspring-----	D	Jan-Dec	---	---	---	---	None	---	None
Rubble Land-----	A	Jan-Dec	---	---	---	---	None	---	None
2291: Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2301: Tecopa-----	D	Jan-Dec	---	---	---	---	None	---	None
Haleburu-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2302: Tecopa-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
Upspring-----	D								

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
		Jan-Dec	---	---	---	---	None	---	None
2304: Tecopa-----	D	Jan-Dec	---	---	---	---	None	---	None
Zibate-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2305: Tecopa-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2310: Nowoy-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
2312: Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
Tanazza-----	B	Jan-Dec	---	---	---	---	None	---	None
2320: Wahguyhe-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
2341: Naye-----	C	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2372: Zalda-----	D	Jan-Dec	---	---	---	---	None	---	None
Bluepoint-----	A	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2373: Zalda-----	D	Jan-Dec	---	---	---	---	None	---	None
Rubble Land-----	A	Jan-Dec	---	---	---	---	None	---	None
Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
2381: Armpup-----	C	Jan-Dec	---	---	---	---	None	---	None
Ashmed-----	B	Jan-Dec	---	---	---	---	None	---	None
2391: Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
Ashmed-----	B	Jan-Dec	---	---	---	---	None	---	None
2392: Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
Ashmed-----	B	Jan-Dec	---	---	---	---	None	---	None
2393: Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
2400: Mobl-----	B	Jan-Dec	---	---	---	---	None	---	None
Scottcas-----	B	Jan-Dec	---	---	---	---	None	---	None
2401: Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
Bacho-----	D	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
2421: Orwash-----	A		Ft	Ft	Ft				
		January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Wilst-----	C	Jan-Dec	---	---	---	---	None	---	None
Agon-----	C	Jan-Dec	---	---	---	---	None	---	None
2422: Orwash-----	A								
		January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Louderback-----	C								
		January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	3.0-5.0	>6.0	---	---	None	Very brief	Rare
		April	3.0-5.0	>6.0	---	---	None	Very brief	Rare
		May	3.0-5.0	>6.0	---	---	None	Very brief	Rare
		June	3.0-5.0	>6.0	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Arizo-----	A								
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
2423: Orwash-----	A	Jan-Dec	---	---	---	---	None	---	None
Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
Wanomie-----	C	Jan-Dec	---	---	---	---	None	---	None
2425: Orwash-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
2431: Zibate-----	D	Jan-Dec	---	---	---	---	None	---	None
Zyplar-----	D	Jan-Dec	---	---	---	---	None	---	None
Dedas-----	D	Jan-Dec	---	---	---	---	None	---	None
2432: Zibate-----	D	Jan-Dec	---	---	---	---	None	---	None
2434: Cruzspring-----	D	Jan-Dec	---	---	---	---	None	---	None
Schader-----	C	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2436: Zibate-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2437: Cruzspring-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2441: Lewdlac-----	D	Jan-Dec	---	---	---	---	None	---	None
Sanwell-----	B	Jan-Dec	---	---	---	---	None	---	None
2451: Sanwell-----	B	Jan-Dec	---	---	---	---	None	---	None
Sanwell-----	B	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
2461: Nowoy-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Skelon-----	C	Jan-Dec	---	---	---	---	None	---	None
2471: Lewdlac-----	D	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
2481: Bacho-----	D	Jan-Dec	---	---	---	---	None	---	None
Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
2482: Bacho-----	D	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
2491: Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Blacktop-----	D	Jan-Dec	---	---	---	---	None	---	None
Tokoper-----	D								

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
		Jan-Dec	---	---	---	---	None	---	None
2492: Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Silverbow-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2493: Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Tognoni-----	D	Jan-Dec	---	---	---	---	None	---	None
Stonell-----	B	Jan-Dec	---	---	---	---	None	---	None
2494: Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Vindicator-----	D	Jan-Dec	---	---	---	---	None	---	None
Stewval-----	D	Jan-Dec	---	---	---	---	None	---	None
2495: Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
2496: Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Pintwater-----	D	Jan-Dec	---	---	---	---	None	---	None
Upspring-----	D	Jan-Dec	---	---	---	---	None	---	None
2500: Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
Greyeagle-----	D	Jan-Dec	---	---	---	---	None	---	None
2501: Wanomie-----	C	Jan-Dec	---	---	---	---	None	---	None
Corbilt-----	B	Jan-Dec	---	---	---	---	None	---	None
2510: Fuegosta-----	D	Jan-Dec	---	---	---	---	None	---	None
Tomel-----	D	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
Izo-----	A	January	---	---	---	---	None	Very brief	Occasional
		February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional
2511: Fuegosta-----	D	Jan-Dec	---	---	---	---	None	---	None
Wardenot-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Izo-----	A	January	---	---	---	---	None	Very brief	Occasional
		February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional
2520: Vigus-----	B	Jan-Dec	---	---	---	---	None	---	None
Fuegosta-----	D	Jan-Dec	---	---	---	---	None	---	None
Izo-----	A	January	---	---	---	---	None	Very brief	Occasional
		February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional
2521: Vigus-----	B	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
Wardenot-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Fuegosta-----	D	Jan-Dec	---	---	---	---	None	---	None
2531: Laxal-----		Jan-Dec	---	---	---	---	None	---	None
Stonell-----	B	Jan-Dec	---	---	---	---	None	---	None
Unsel-----		Jan-Dec	---	---	---	---	None	---	None
2532: Laxal-----	B	Jan-Dec	---	---	---	---	None	---	None
Fang-----		Jan-Dec	---	---	---	---	None	---	None
2540: Lidan-----	C	Jan-Dec	---	---	---	---	None	---	None
Izo-----		A	January	---	---	---	---	None	Very brief
2550: Stonewall-----	A	February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional
		Jan-Dec	---	---	---	---	None	---	None
		Izo-----	A	January	---	---	---	---	None
February	---	---		---	---	None	Very brief	Occasional	
March	---	---		---	---	None	Very brief	Occasional	
April	---	---		---	---	None	Very brief	Occasional	
May	---	---		---	---	None	Very brief	Occasional	
June	---	---		---	---	None	Very brief	Occasional	
July	---	---		---	---	None	Very brief	Occasional	
August	---	---		---	---	None	Very brief	Occasional	
December	---	---		---	---	None	Very brief	Occasional	
Lidan-----	C	Jan-Dec		---	---	---	---	None	---
2570: Stargo-----		B	January	---	---	---	---	None	Brief
		February	---	---	---	---	None	Brief	Occasional
		March	---	---	---	---	None	Brief	Occasional
		April	---	---	---	---	None	Brief	Occasional
		May	---	---	---	---	None	Brief	Occasional
		June	---	---	---	---	None	Brief	Occasional
		July	---	---	---	---	None	Brief	Occasional

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
Playas-----	D	February	0.0	>6.0	0.0-1.0	Long	None	---	None
		March	0.0	>6.0	0.0-1.0	Long	None	---	None
		April	0.0	>6.0	0.0-1.0	Long	None	---	None
		May	0.0	>6.0	0.0-1.0	Long	None	---	None
		June	0.0	>6.0	0.0-1.0	Long	None	---	None
		July	0.0	>6.0	0.0-1.0	Long	None	---	None
		August	0.0	>6.0	0.0-1.0	Long	None	---	None
		September	0.0	>6.0	0.0-1.0	Long	None	---	None
2580: Wardenot-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Izo-----	A	January	---	---	---	---	None	Very brief	Occasional
		February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional
2601: Cobatus-----	C	February	3.0-3.5	>6.0	---	---	None	---	None
		March	3.0-3.5	>6.0	---	---	None	---	None
Kawich-----	A	Jan-Dec	---	---	---	---	None	---	None
2611: Corbilt-----	B	Jan-Dec	---	---	---	---	None	---	None
2630: Wechech-----	D	Jan-Dec	---	---	---	---	None	---	None
Commski-----	B	Jan-Dec	---	---	---	---	None	---	None
2640: Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Advokay-----	D	Jan-Dec	---	---	---	---	None	---	None
Pintwater-----	D	Jan-Dec	---	---	---	---	None	---	None
2641: Advokay-----	D	Jan-Dec	---	---	---	---	None	---	None
Ardivey-----	B	Jan-Dec	---	---	---	---	None	---	None
Leo-----	A	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
2642: Advokay-----	D	Jan-Dec	---	---	---	---	None	---	None
Blacktop-----	D	Jan-Dec	---	---	---	---	None	---	None
2650: Luning-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Wardenot-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Izo-----	A	January	---	---	---	---	None	Very brief	Occasional
		February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional
2660: Stonell-----	B	Jan-Dec	---	---	---	---	None	---	None
Wardenot-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Izo-----	A	January	---	---	---	---	None	Very brief	Occasional
		February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2670: Ardivey-----	B	Jan-Dec	---	---	---	---	None	---	None
Izo-----	A	January	---	---	---	---	None	Very brief	Occasional
		February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional
2671: Ardivey-----	B	Jan-Dec	---	---	---	---	None	---	None
Stonell-----	B	Jan-Dec	---	---	---	---	None	---	None
Izo-----	A	January	---	---	---	---	None	Very brief	Occasional
		February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional
2680: Espint-----	D	Jan-Dec	---	---	---	---	None	---	None
Vindicator-----	D	Jan-Dec	---	---	---	---	None	---	None
Espint-----	D	Jan-Dec	---	---	---	---	None	---	None
2681: Espint-----	D	Jan-Dec	---	---	---	---	None	---	None
Stewval-----	D	Jan-Dec	---	---	---	---	None	---	None
Vindicator-----	D	Jan-Dec	---	---	---	---	None	---	None
2682: Espint-----	D	Jan-Dec	---	---	---	---	None	---	None
Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
Stewval-----	D	Jan-Dec	---	---	---	---	None	---	None
2690: Leo-----	A	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
Izo-----	A	January	---	---	---	---	None	Very brief	Occasional
		February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional
2701: Cobatus-----	C	February	3.0-3.5	>6.0	---	---	None	---	None
		March	3.0-3.5	>6.0	---	---	None	---	None
2710: Papoose-----	B	Jan-Dec	---	---	---	---	None	---	None
Vindicator-----	D	Jan-Dec	---	---	---	---	None	---	None
Espint-----	D	Jan-Dec	---	---	---	---	None	---	None
2720: Unsel-----	B	Jan-Dec	---	---	---	---	None	---	None
Stonell-----	B	Jan-Dec	---	---	---	---	None	---	None
Veet-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2730: Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
Blacktop-----	D	Jan-Dec	---	---	---	---	None	---	None
Espint-----	D	Jan-Dec	---	---	---	---	None	---	None
2731: Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Vindicator-----	D	Jan-Dec	---	---	---	---	None	---	None
2732: Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
Tognoni-----	D	Jan-Dec	---	---	---	---	None	---	None
Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2734: Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
2735: Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
Wahguyhe-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2736: Gabbvally-----	D	Jan-Dec	---	---	---	---	None	---	None
Brier-----	D	Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---	Jan-Dec	---	---	---	---	None	---	None
2740: Tognoni-----	D	Jan-Dec	---	---	---	---	None	---	None
Blacktop-----	D	Jan-Dec	---	---	---	---	None	---	None
2741: Blacktop-----	D	Jan-Dec	---	---	---	---	None	---	None
Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Tognoni-----	D	Jan-Dec	---	---	---	---	None	---	None
2750: Silverbow-----	D	Jan-Dec	---	---	---	---	None	---	None
Wardenot-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
Izo-----	A	January	---	---	---	---	None	Very brief	Occasional
		February	---	---	---	---	None	Very brief	Occasional
		March	---	---	---	---	None	Very brief	Occasional
		April	---	---	---	---	None	Very brief	Occasional
		May	---	---	---	---	None	Very brief	Occasional
		June	---	---	---	---	None	Very brief	Occasional
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		December	---	---	---	---	None	Very brief	Occasional
2760: Downeyville-----	D	Jan-Dec	---	---	---	---	None	---	None
Unsel-----	B	Jan-Dec	---	---	---	---	None	---	None
Tokoper-----	D	Jan-Dec	---	---	---	---	None	---	None
2770: Bullfor-----	C	Jan-Dec	---	---	---	---	None	---	None
Panor-----	B	Jan-Dec	---	---	---	---	None	---	None
Bluepoint-----	A	Jan-Dec	---	---	---	---	None	---	None
2781: Haymont-----	B	Jan-Dec	---	---	---	---	None	---	None
Bluepoint-----	A	Jan-Dec	---	---	---	---	None	---	None
Panor-----	B	Jan-Dec	---	---	---	---	None	---	None
2810: Ashmed, moist-----	B	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Niavi-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2820: Strozi-----	C	Jan-Dec	---	---	---	---	None	---	None
Corbilt-----	B	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2840: Armpup-----	C	Jan-Dec	---	---	---	---	None	---	None
Strozi-----	C	Jan-Dec	---	---	---	---	None	---	None
2850: Scottcas-----	B	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
2860: Sezna-----	D	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
2870: Kanackey-----	D	Jan-Dec	---	---	---	---	None	---	None
2880: Bacho-----	D	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
Arizo-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2890: Nopah-----	C	Jan-Dec	---	---	---	---	None	---	None
Woda-----	D	Jan-Dec	---	---	---	---	None	---	None
Gullied Land-----	---	January	---	---	---	---	None	Brief	Frequent
		February	---	---	---	---	None	Brief	Frequent
		March	---	---	---	---	None	Brief	Frequent
		April	---	---	---	---	None	Brief	Frequent
		May	---	---	---	---	None	Brief	Frequent
		June	---	---	---	---	None	Brief	Frequent
		July	---	---	---	---	None	Brief	Frequent
		August	---	---	---	---	None	Brief	Frequent
		September	---	---	---	---	None	Brief	Frequent
		December	---	---	---	---	None	Brief	Frequent

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
2900: Playas-----	D		Ft	Ft	Ft				
		February	0.0	>6.0	0.0-1.0	Long	None	---	None
		March	0.0	>6.0	0.0-1.0	Long	None	---	None
		April	0.0	>6.0	0.0-1.0	Long	None	---	None
		May	0.0	>6.0	0.0-1.0	Long	None	---	None
		June	0.0	>6.0	0.0-1.0	Long	None	---	None
		July	0.0	>6.0	0.0-1.0	Long	None	---	None
		August	0.0	>6.0	0.0-1.0	Long	None	---	None
		September	0.0	>6.0	0.0-1.0	Long	None	---	None
2901: Playas-----	D								
		February	0.0	>6.0	0.0-1.0	Long	None	---	None
		March	0.0	>6.0	0.0-1.0	Long	None	---	None
		April	0.0	>6.0	0.0-1.0	Long	None	---	None
		May	0.0	>6.0	0.0-1.0	Long	None	---	None
		June	0.0	>6.0	0.0-1.0	Long	None	---	None
		July	0.0	>6.0	0.0-1.0	Long	None	---	None
		August	0.0	>6.0	0.0-1.0	Long	None	---	None
		September	0.0	>6.0	0.0-1.0	Long	None	---	None
Corbilt-----	B								
		Jan-Dec	---	---	---	---	None	---	None
Bluepoint-----	A								
		Jan-Dec	---	---	---	---	None	---	None
2903: Playas-----	D								
		February	0.0	>6.0	0.0-1.0	Long	None	---	None
		March	0.0	>6.0	0.0-1.0	Long	None	---	None
		April	0.0	>6.0	0.0-1.0	Long	None	---	None
		May	0.0	>6.0	0.0-1.0	Long	None	---	None
		June	0.0	>6.0	0.0-1.0	Long	None	---	None
		July	0.0	>6.0	0.0-1.0	Long	None	---	None
		August	0.0	>6.0	0.0-1.0	Long	None	---	None
		September	0.0	>6.0	0.0-1.0	Long	None	---	None
Mobl-----	B								
		Jan-Dec	---	---	---	---	None	---	None
Kawich-----	A								
		Jan-Dec	---	---	---	---	None	---	None
2910: Dune Land-----	A								
		Jan-Dec	---	---	---	---	None	---	None
2920: Dumps-----	---								
		Jan-Dec	---	---	---	---	None	---	None
2930: Seralin-----	D								
		Jan-Dec	---	---	---	---	None	---	None
Rock Outcrop-----	---								
		Jan-Dec	---	---	---	---	None	---	None
Sed-----	C								
		Jan-Dec	---	---	---	---	None	---	None
2940: Schader-----	C								
		Jan-Dec	---	---	---	---	None	---	None
Sed-----	C								
		Jan-Dec	---	---	---	---	None	---	None
Cruzspring-----	D								
		Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
2950: Pits-----	---	Jan-Dec	---	---	---	---	None	---	None
2951: Pits-----	---	Jan-Dec	---	---	---	---	None	---	None
2960: Tomel-----	D	Jan-Dec	---	---	---	---	None	---	None
Ardivey-----	B	Jan-Dec	---	---	---	---	None	---	None
Wardenot-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2961: Tomel-----	D	Jan-Dec	---	---	---	---	None	---	None
Breko-----	B	Jan-Dec	---	---	---	---	None	---	None
Wardenot-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
2970: Destazo-----	B	Jan-Dec	---	---	---	---	None	---	None
Nowoy-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
Gullied Land-----	---	January	---	---	---	---	None	Brief	Frequent
		February	---	---	---	---	None	Brief	Frequent
		March	---	---	---	---	None	Brief	Frequent
		April	---	---	---	---	None	Brief	Frequent
		May	---	---	---	---	None	Brief	Frequent
		June	---	---	---	---	None	Brief	Frequent
		July	---	---	---	---	None	Brief	Frequent
		August	---	---	---	---	None	Brief	Frequent
		September	---	---	---	---	None	Brief	Frequent
		December	---	---	---	---	None	Brief	Frequent
2971: Upspring-----	D	Jan-Dec	---	---	---	---	None	---	None
2990: Lealandic-----	D	Jan-Dec	---	---	---	---	None	---	None
Ashmed-----	B	Jan-Dec	---	---	---	---	None	---	None
3021: Casaga-----	C	Jan-Dec	---	---	---	---	None	---	None
Destazo-----	B	Jan-Dec	---	---	---	---	None	---	None
Yurm-----	D	Jan-Dec	---	---	---	---	None	---	None
3022: Casaga-----	C	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Woda-----	D	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
3052: Bohnobob-----	C	January	4.0-5.0	>6.0	---	---	None	Very brief	Rare
		February	4.0-5.0	>6.0	---	---	None	Very brief	Rare
		March	4.0-5.0	>6.0	---	---	None	Very brief	Rare
		April	4.0-5.0	>6.0	---	---	None	Very brief	Rare
		May	4.0-5.0	>6.0	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	4.0-5.0	>6.0	---	---	None	Very brief	Rare
Caslo-----	D	January	1.0-2.0	>6.0	---	---	None	---	None
		February	1.0-2.0	>6.0	---	---	None	---	None
		March	1.0-2.0	>6.0	---	---	None	---	None
		July	---	---	---	---	None	Very brief	Occasional
		August	---	---	---	---	None	Very brief	Occasional
		September	---	---	---	---	None	Very brief	Occasional
3101: Bluepoint-----	A	Jan-Dec	---	---	---	---	None	---	None
Besherm-----	C	Jan-Dec	---	---	---	---	None	---	None
3120: Nowoy-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Tanazza-----	B	Jan-Dec	---	---	---	---	None	---	None
Yurm-----	D	Jan-Dec	---	---	---	---	None	---	None
3150: Casaga-----	C	Jan-Dec	---	---	---	---	None	---	None
3230: Alko-----	D	Jan-Dec	---	---	---	---	None	---	None
Casaga-----	C	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare

TABLE 14.--WATER FEATURES--Continued

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
			Ft	Ft	Ft				
3252: Bobnbob-----	C	January	3.0-4.0	>6.0	---	---	None	Brief	Occasional
		February	3.0-4.0	>6.0	---	---	None	Brief	Occasional
		March	3.0-4.0	>6.0	---	---	None	Brief	Occasional
		April	3.0-4.0	>6.0	---	---	None	Brief	Occasional
		May	3.0-4.0	>6.0	---	---	None	Brief	Occasional
		December	3.0-4.0	>6.0	---	---	None	---	None
Cobatus-----	C	February	3.0-3.5	>6.0	---	---	None	---	None
		March	3.0-3.5	>6.0	---	---	None	---	None
3302: Rumpah-----	D	Jan-Dec	---	---	---	---	None	---	None
3313: Besherm-----	C	Jan-Dec	---	---	---	---	None	---	None
3320: Haymont-----	B	Jan-Dec	---	---	---	---	None	---	None
3333: Nopah-----	C	Jan-Dec	---	---	---	---	None	---	None
4010: Tanazza-----	B	Jan-Dec	---	---	---	---	None	---	None
Wechech-----	D	Jan-Dec	---	---	---	---	None	---	None
Wodavar-----	D	Jan-Dec	---	---	---	---	None	---	None
4030: Wechech-----	D	Jan-Dec	---	---	---	---	None	---	None
Nopah-----	C	Jan-Dec	---	---	---	---	None	---	None
Yermo-----	B	Jan-Dec	---	---	---	---	None	---	None
4060: Besherm-----	C	Jan-Dec	---	---	---	---	None	---	None
Tanazza-----	B	Jan-Dec	---	---	---	---	None	---	None
4070: Gynelle-----	A	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
Kawich-----	A	Jan-Dec	---	---	---	---	None	---	None

TABLE 14.--WATER FEATURES

Map symbol and soil name	Hydro- logic group	Month	Water table		Ponding			Flooding	
			Upper limit	Lower limit	Surface water depth	Duration	Frequency	Duration	Frequency
Cirac-----	B	January	---	---	---	---	None	Very brief	Rare
		February	---	---	---	---	None	Very brief	Rare
		March	---	---	---	---	None	Very brief	Rare
		April	---	---	---	---	None	Very brief	Rare
		May	---	---	---	---	None	Very brief	Rare
		June	---	---	---	---	None	Very brief	Rare
		July	---	---	---	---	None	Very brief	Rare
		August	---	---	---	---	None	Very brief	Rare
		September	---	---	---	---	None	Very brief	Rare
		October	---	---	---	---	None	Very brief	Rare
		November	---	---	---	---	None	Very brief	Rare
		December	---	---	---	---	None	Very brief	Rare
4071: Corbilt-----	B	Jan-Dec	---	---	---	---	None	---	None
4080: Water-----	---	Jan-Dec	---	---	---	---	None	---	None

TABLE 15.--SOIL FEATURES

(See text for definitions of terms used in this table. Absence of an entry indicates that the feature is not a concern or that data were not estimated.)

Map symbol and soil name	Restrictive layer			Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness	Uncoated steel	Concrete
		In	In			
1314: Weiser-----	---	---	---	---	None	High Low
Wechech-----	Petrocalcic	8-14	4-17	---	Low	High Low
1315: Lastchance-----	Petrocalcic	20-39	36-40	Very strongly cemented	Moderate	High Low
Lastchance, upper elevation fans-----	Petrocalcic	20-39	36-40	Very strongly cemented	Moderate	High Low
Commski-----	---	---	---	---	Low	High Low
1316: Lastchance-----	Petrocalcic	20-39	36-40	Very strongly cemented	Moderate	High Low
Ferrogold-----	Petrocalcic	14-20	26-59	Very strongly cemented	Moderate	High Low
Commski-----	---	---	---	---	Low	High Low
1317: Commski-----	---	---	---	---	Low	High Low
Lastchance-----	Petrocalcic	20-39	36-40	Very strongly cemented	Moderate	High Low
1320: Boxspring-----	Bedrock (lithic)	14-20	---	---	Low	High Low
Zeheme-----	Bedrock (lithic)	7-14	---	---	Low	High Low
Rock Outcrop-----	---	---	---	---	---	---
1321: Boxspring-----	Bedrock (lithic)	14-20	---	---	Low	High Low
Seralin-----	Bedrock (lithic)	14-20	---	---	Low	Low High
Rock Outcrop-----	---	---	---	---	---	---
1340: Longjim-----	Duripan	14-20	4-17	---	Low	High Low
Niavi-----	---	---	---	---	Low	High Low
1871: Irongold-----	Petrocalcic	10-14	---	---	---	High Low
Irongold-----	Petrocalcic	10-14	---	---	---	High Low
Weiser-----	---	---	---	---	Low	High Low
2002: Rock Outcrop-----	---	---	---	---	---	---
Upspring-----	Bedrock (lithic)	4-14	---	---	None	High Low
Rubble Land-----	Bedrock (lithic)	40-60	---	---	None	---
2004: Rock Outcrop-----	---	---	---	---	---	---
Zyplar-----	Bedrock (lithic)	9-14	---	---	Low	High Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
2005: Rock Outcrop-----	---	---	---	---	---	---	---
St. Thomas-----	Bedrock (lithic)	4-20	---	---	Low	High	Low
St. Thomas-----	Bedrock (lithic)	4-20	---	---	Low	High	Low
2010: Longjim-----	Duripan	14-20	4-17	---	Low	High	Low
2011: Sanwell-----	---	---	---	---	Low	High	Moderate
Sanwell-----	---	---	---	---	Low	High	Moderate
2012: Zalda-----	Duripan	7-14	0-3	---	None	High	Low
	Bedrock (lithic)	8-20	---	---			
Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
Upspring-----	Bedrock (lithic)	4-14	---	---	None	High	Low
2013: Longjim-----	Duripan	14-20	4-17	---	Low	High	Low
Yurm-----	Petrocalcic	10-20	---	---	---	High	Moderate
2020: Weiser-----	---	---	---	---	None	High	Low
Canoto-----	---	---	---	---	None	High	Low
2021: Weiser-----	---	---	---	---	None	High	Low
Nickel-----	---	---	---	---	None	High	Low
2023: Commski-----	---	---	---	---	Low	High	Low
Commski-----	---	---	---	---	Low	High	Low
Sezna-----	Petrocalcic	10-20	4-17	---	Low	High	Low
2030: Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
2031: Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
2040: Yurm-----	Petrocalcic	10-20	---	---	---	High	Moderate
Canoto-----	---	---	---	---	None	High	Low
Yurm, moist-----	Petrocalcic	10-20	---	---	---	High	Moderate
2050: Canoto-----	---	---	---	---	None	High	Low
Naye-----	Petrocalcic	20-40	4-17	---	None	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
2051:							
Yermo-----	---	---	---	---	Low	High	Low
Woda-----	Petrocalcic	6-20	4-17	---	None	High	Moderate
Nowoy-----	---	---	---	---	None	High	Moderate
2052:							
Canoto-----	---	---	---	---	None	High	Low
2053:							
Yermo-----	---	---	---	---	Low	High	Low
Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
Arizo-----	---	---	---	---	---	High	Low
2054:							
Yermo, hot-----	---	---	---	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2055:							
Canoto-----	---	---	---	---	None	High	Low
Canoto, moist-----	---	---	---	---	None	High	Low
2057:							
Yermo-----	---	---	---	---	Low	High	Low
Commski-----	---	---	---	---	Low	High	Low
2058:							
Canoto-----	---	---	---	---	None	High	Low
Nickel-----	---	---	---	---	None	High	Low
2060:							
Purob-----	Petrocalcic	14-20	4-17	---	Low	High	Low
Irongold-----	Petrocalcic	10-14	---	---	---	High	Low
2061:							
Vace-----	Petrocalcic	4-20	4-17	---	None	High	Low
2062:							
Purob-----	Petrocalcic	10-20	4-17	---	None	High	Moderate
Niavi-----	---	---	---	---	Low	High	Low
2064:							
Longjim, summer precip.	Duripan	14-20	4-17	---	Low	High	Low
Purob-----	Petrocalcic	10-20	4-17	---	None	High	Moderate
Niavi-----	---	---	---	---	Low	High	Low
2070:							
Shamock-----	Duripan	25-40	4-17	---	---	High	Low
2071:							
Shamock-----	Duripan	25-40	4-17	---	---	High	Low
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
2080:							
St. Thomas-----	Bedrock (lithic)	4-20	---	---	Low	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
Commski-----	---	---	---	---	Low	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
2081:							
St. Thomas-----	Bedrock (lithic)	4-20	---	---	Low	High	Low
Tecopa-----	Bedrock (lithic)	2-10	---	---	Low	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2090:							
Breko-----	---	---	---	---	Moderate	High	Low
Veet-----	---	---	---	---	Moderate	High	Low
2110:							
Pahrump-----	---	---	---	---	Low	High	Low
2121:							
Commski-----	---	---	---	---	Low	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2131:							
Upspring-----	Bedrock (lithic)	4-14	---	---	None	High	Low
Shorim-----	Duripan	20-38	0-3	---	None	High	Low
	Bedrock (lithic)	21-40	---	---			
Rock Outcrop-----	---	---	---	---	---	---	---
2140:							
Jonnice-----	Duripan	25-40	4-17	---	Low	High	Low
Niavi-----	---	---	---	---	Low	High	Low
2151:							
Arizo-----	---	---	---	---	Low	High	Low
Bluepoint-----	---	---	---	---	Low	High	High
Dune Land-----	---	---	---	---	None	Low	Low
2152:							
Arizo-----	---	---	---	---	Low	High	Low
2153:							
Arizo-----	---	---	---	---	Low	High	Low
Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
Commski-----	---	---	---	---	Low	High	Low
2161:							
Casaga-----	---	---	---	---	None	High	High
Nowoy-----	---	---	---	---	None	High	Moderate
2162:							
Casaga-----	---	---	---	---	Moderate	High	High
Panor-----	---	---	---	---	None	High	High
Yermo-----	---	---	---	---	Low	High	Low
2171:							
Sanwell-----	---	---	---	---	Low	High	Moderate
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top In	Thickness In	Hardness		Uncoated steel	Concrete
2172:							
Sanwell-----	---	---	---	---	Low	High	Moderate
Yermo-----	---	---	---	---	Low	High	Low
2181:							
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low
Pinez-----	Duripan	40-60	4-17	---	None	High	Low
2184:							
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
Bullfor-----	Duripan	20-40	0-3	---	None	High	Low
2185:							
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low
Ashmed-----	---	---	---	---	None	High	High
2186:							
Yermo-----	---	---	---	---	Low	High	Low
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
Pinez-----	Duripan	40-60	4-17	---	None	High	Low
2191:							
Pinez-----	Duripan	40-60	4-17	---	None	High	Low
Lealandic-----	Duripan	20-40	4-17	---	---	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2201:							
Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2202:							
Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
Migern-----	---	---	---	---	Low	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2204:							
Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
Wodavar-----	Petrocalcic	10-20	4-17	---	Low	High	Low
Sanwell-----	---	---	---	---	Low	High	Moderate
2212:							
Yermo-----	---	---	---	---	Low	High	Low
Bullfor-----	Duripan	20-40	0-3	---	None	High	Low
2214:							
Yermo-----	---	---	---	---	Low	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2215:							
Yermo-----	---	---	---	---	Low	High	Low
Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top In	Thickness In	Hardness		Uncoated steel	Concrete
2216: Yermo-----	---	---	---	---	Low	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2218: Sanwell-----	---	---	---	---	Low	High	Moderate
Commski-----	---	---	---	---	Low	High	High
2220: Canoto-----	---	---	---	---	None	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2221: Sanwell-----	---	---	---	---	Low	High	Moderate
Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
2222: Niavi-----	---	---	---	---	Low	High	Low
Jonnica-----	Duripan	25-40	4-17	---	Low	High	Low
2230: Yermo-----	---	---	---	---	Low	High	Low
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
2233: Yermo-----	---	---	---	---	Low	High	Low
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
Bluepoint-----	---	---	---	---	Low	High	High
2250: Tokoper-----	Bedrock (lithic)	8-15	---	---	Low	High	Low
	Duripan	8-14	0-3	---			
Upspring-----	Bedrock (lithic)	4-14	---	---	None	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2251: Tokoper-----	Bedrock (lithic)	8-15	---	---	Low	High	Low
	Duripan	8-14	0-3	---			
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Pintwater-----	Bedrock (lithic)	10-20	---	---	Low	High	Low
2252: Tokoper-----	Bedrock (lithic)	8-15	---	---	Low	High	Low
	Duripan	8-14	0-3	---			
Blacktop-----	Bedrock (lithic)	4-10	---	---	Low	High	Low
2253: Tokoper-----	Bedrock (lithic)	8-15	---	---	Low	High	Low
	Duripan	8-14	0-3	---			
Ardivey-----	---	---	---	---	Low	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
2254: Tokoper-----	Bedrock (lithic)	8-15	---	---	Low	High	Low
	Duripan	8-14	0-3	---			
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Espint-----	Bedrock (paralithic)	6-14	---	---	Low	High	Low
2260: Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
2261: Longjim-----	Duripan	14-20	4-17	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low
Dedas-----	Duripan	14-20	0-3	---	Low	High	Low
	Bedrock (lithic)	16-24	---	---			
2263: Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
Sanwell-----	---	---	---	---	Low	High	Moderate
Yermo-----	---	---	---	---	Low	High	Low
2266: Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
2267: Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
2268: Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2269: Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low
Strozi-----	Duripan	20-40	0-3	---	None	High	Low
2270: Bluepoint-----	---	---	---	---	Low	High	High
2271: Kawich-----	---	---	---	---	Low	High	Low
Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
Wanomie-----	Duripan	20-40	0-3	---	---	High	High
2280: Shorim-----	Duripan	20-38	0-3	---	None	High	Low
	Bedrock (lithic)	21-40	---	---			
Zalda-----	Duripan	7-14	0-3	---	None	High	Low
	Bedrock (lithic)	8-20	---	---			
Upspring-----	Bedrock (lithic)	4-14	---	---	None	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
2281: Shorim-----	Duripan	20-38	0-3	---	None	High	Low
	Bedrock (lithic)	21-40	---	---			
Yermo-----	---	---	---	---	Low	High	Low
2282: Dedas-----	Duripan	14-20	0-3	---	Low	High	Low
	Bedrock (lithic)	16-24	---	---			
Orwash-----	---	---	---	---	Low	High	Low
2290: Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
Upspring-----	Bedrock (lithic)	4-14	---	---	None	High	Low
Rubble Land-----	Bedrock (lithic)	40-60	---	---	None	---	---
2291: Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2301: Tecopa-----	Bedrock (lithic)	2-10	---	---	Low	High	Low
Haleburu-----	Bedrock (lithic)	4-14	---	---	---	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2302: Tecopa-----	Bedrock (lithic)	2-10	---	---	Low	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
Upspring-----	Bedrock (lithic)	4-14	---	---	None	High	Low
2304: Tecopa-----	Bedrock (lithic)	2-10	---	---	Low	High	Low
Zibate-----	Bedrock (lithic)	4-20	---	---	---	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2305: Tecopa-----	Bedrock (lithic)	2-10	---	---	Low	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2310: Nowoy-----	---	---	---	---	None	High	Moderate
Commski-----	---	---	---	---	Low	High	Low
2312: Commski-----	---	---	---	---	Low	High	Low
Tanazza-----	---	---	---	---	None	High	High
2320: Wahguyhe-----	Bedrock (lithic)	14-20	---	---	Low	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
2341: Naye-----	Petrocalcic	20-40	4-17	---	None	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
2372: Zalda-----	Duripan	7-14	0-3	---	None	High	Low
	Bedrock (lithic)	8-20	---	---			
Bluepoint-----	---	---	---	---	Low	High	High
Rock Outcrop-----	---	---	---	---	---	---	---
2373: Zalda-----	Duripan	7-14	0-3	---	None	High	Low
	Bedrock (lithic)	8-20	---	---			
Rubble Land-----	Bedrock (lithic)	40-60	---	---	None	---	---
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
2381: Armpup-----	Bedrock (paralithic)	40-60	---	---	Low	High	Moderate
Ashmed-----	---	---	---	---	None	High	High
2391: Commski-----	---	---	---	---	Low	High	High
Ashmed-----	---	---	---	---	None	High	High
2392: Commski-----	---	---	---	---	Low	High	Low
Ashmed-----	---	---	---	---	None	High	High
2393: Commski-----	---	---	---	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low
2400: Mobl-----	---	---	---	---	Low	High	Low
Scottcas-----	---	---	---	---	Low	High	Moderate
2401: Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
Bacho-----	Duripan	8-14	4-17	---	Low	High	Low
2421: Orwash-----	---	---	---	---	Low	High	Low
Wilst-----	Bedrock (lithic)	20-40	---	---	Low	High	Low
Agon-----	Bedrock (lithic)	30-40	---	---	Low	High	Low
	Duripan	30-39	0-3	---			
2422: Orwash-----	---	---	---	---	Low	High	Low
Louderback-----	---	---	---	---	Moderate	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2423: Orwash-----	---	---	---	---	Low	High	Low
Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
Wanomie-----	Duripan	20-40	4-17	---	---	High	High

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
2425: Orwash-----	---	---	---	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2431: Zibate-----	Bedrock (lithic)	4-20	---	---	---	High	Low
Zyplar-----	Bedrock (lithic)	9-14	---	---	Low	High	Low
Dedas-----	Duripan	14-20	0-3	---	Low	High	Low
	Bedrock (lithic)	16-24	---	---			
2432: Zibate-----	Bedrock (lithic)	4-20	---	---	---	High	Low
2434: Cruzspring-----	Bedrock (paralithic)	10-14	---	Weakly cemented	Moderate	High	Low
	Bedrock (lithic)	12-20	---	Indurated			
Schader-----	Bedrock (lithic)	20-40	---	Indurated	Moderate	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2436: Zibate-----	Bedrock (lithic)	4-20	---	---	---	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2437: Cruzspring-----	Bedrock (paralithic)	10-14	---	Weakly cemented	Moderate	High	Low
	Bedrock (lithic)	12-20	---	Indurated			
Rock Outcrop-----	---	---	---	---	---	---	---
2441: Lewdlac-----	Duripan	10-20	4-17	---	Low	High	Low
Sanwell-----	---	---	---	---	Low	High	Moderate
2451: Sanwell-----	---	---	---	---	Low	High	Moderate
Sanwell-----	---	---	---	---	Low	High	Moderate
Yermo-----	---	---	---	---	Low	High	Low
2461: Nowoy-----	---	---	---	---	None	High	Moderate
Skelon-----	Duripan	20-40	4-17	---	Low	High	Low
2471: Lewdlac-----	Duripan	10-20	4-17	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low
2481: Bacho-----	Duripan	8-14	4-17	---	Low	High	Low
Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
2482: Bacho-----	Duripan	8-14	4-17	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
2491:							
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Blacktop-----	Bedrock (lithic)	4-10	---	---	Low	High	Low
Tokoper-----	Bedrock (lithic)	8-15	---	---	Low	High	Low
	Duripan	8-14	0-3	---			
2492:							
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Silverbow-----	Duripan	8-14	4-17	---	Low	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2493:							
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Tognoni-----	Bedrock (lithic)	5-14	---	---	Low	High	Low
Stonell-----	---	---	---	---	Low	High	Low
2494:							
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Vindicator-----	Bedrock (paralithic)	4-14	---	---	Low	High	Low
Stewval-----	Bedrock (lithic)	4-14	---	---	Moderate	Moderate	Low
2495:							
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
2496:							
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Pintwater-----	Bedrock (lithic)	10-20	---	---	Low	High	Low
Upspring-----	Bedrock (lithic)	4-14	---	---	None	High	Low
2500:							
Commski-----	---	---	---	---	Low	High	Low
Greyeagle-----	Duripan	8-14	4-17	---	Low	High	Low
2501:							
Wanomie-----	Duripan	20-40	4-17	---	---	High	High
Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
2510:							
Fuegosta-----	Duripan	14-20	4-17	---	Low	High	Low
Tomel-----	Duripan	10-20	4-17	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
2511:							
Fuegosta-----	Duripan	14-20	4-17	---	Low	High	Low
Wardenot-----	---	---	---	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top In	Thickness In	Hardness		Uncoated steel	Concrete
2520: Vigus-----	---	---	---	---	Low	High	Low
Fuegosta-----	Duripan	14-20	4-17	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
2521: Vigus-----	---	---	---	---	Low	High	Low
Wardenot-----	---	---	---	---	Low	High	Low
Fuegosta-----	Duripan	14-20	4-17	---	Low	High	Low
2531: Laxal-----	---	---	---	---	Low	High	Moderate
Stonell-----	---	---	---	---	Low	High	Low
Unsel-----	---	---	---	---	Low	High	Low
2532: Laxal-----	---	---	---	---	Low	High	Moderate
Fang-----	---	---	---	---	Low	High	Low
2540: Lidan-----	Duripan	20-40	4-17	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
2550: Stonewall-----	---	---	---	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
Lidan-----	Duripan	20-40	4-17	---	Low	High	Low
2570: Stargo-----	---	---	---	---	Low	High	Low
Playas-----	---	---	---	---	None	High	High
2580: Wardenot-----	---	---	---	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
2601: Cobatus-----	---	---	---	---	None	High	High
Kawich-----	---	---	---	---	Low	High	Low
2611: Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
2630: Wehech-----	Petrocalcic	7-20	4-17	---	Low	High	Low
Commski-----	---	---	---	---	Low	High	Low
2640: Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Advokay-----	Bedrock (paralithic)	4-14	---	---	Low	High	Low
Pintwater-----	Bedrock (lithic)	10-20	---	---	Low	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
2641:		In	In				
Advokay-----	Bedrock (paralithic)	4-14	---	---	Low	High	Low
Ardivey-----	---	---	---	---	Low	High	Low
Leo-----	---	---	---	---	Low	High	Low
2642:							
Advokay-----	Bedrock (paralithic)	4-14	---	---	Low	High	Low
Blacktop-----	Bedrock (lithic)	4-10	---	---	Low	High	Low
2650:							
Luning-----	---	---	---	---	Low	High	Low
Wardenot-----	---	---	---	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
2660:							
Stonell-----	---	---	---	---	Low	High	Low
Wardenot-----	---	---	---	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
2670:							
Ardivey-----	---	---	---	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
2671:							
Ardivey-----	---	---	---	---	Low	High	Low
Stonell-----	---	---	---	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
2680:							
Espint-----	Bedrock (paralithic)	6-14	---	---	Low	High	Low
Vindicator-----	Bedrock (paralithic)	4-14	---	---	Low	High	Low
Espint-----	Bedrock (paralithic)	6-14	---	---	Low	High	Low
2681:							
Espint-----	Bedrock (paralithic)	6-14	---	---	Low	High	Low
Stewval-----	Bedrock (lithic)	4-14	---	---	Moderate	Moderate	Low
Vindicator-----	Bedrock (paralithic)	4-14	---	---	Low	High	Low
2682:							
Espint-----	Bedrock (paralithic)	6-14	---	---	Low	High	Low
Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
Stewval-----	Bedrock (lithic)	4-14	---	---	Moderate	Moderate	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
2690: Leo-----	---	---	---	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
2701: Cobatus-----	---	---	---	---	None	High	High
2710: Papoose-----	---	---	---	---	Low	High	Low
Vindicator-----	Bedrock (paralithic)	4-14	---	---	Low	High	Low
Espint-----	Bedrock (paralithic)	6-14	---	---	Low	High	Low
2720: Unsel-----	---	---	---	---	Low	High	Low
Stonell-----	---	---	---	---	Low	High	Low
Veet-----	---	---	---	---	Moderate	High	Low
2730: Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
Blacktop-----	Bedrock (lithic)	4-10	---	---	Low	High	Low
Espint-----	Bedrock (paralithic)	6-14	---	---	Low	High	Low
2731: Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Vindicator-----	Bedrock (paralithic)	4-14	---	---	Low	High	Low
2732: Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
Tognoni-----	Bedrock (lithic)	5-14	---	---	Low	High	Low
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
2734: Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
2735: Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
Wahguyhe-----	Bedrock (lithic)	14-20	---	---	Low	High	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2736: Gabbvally-----	Bedrock (lithic)	6-14	---	---	Moderate	Moderate	Low
Brier-----	Bedrock (lithic)	14-20	---	---	Moderate	Moderate	Low
Rock Outcrop-----	---	---	---	---	---	---	---
2740: Tognoni-----	Bedrock (lithic)	5-14	---	---	Low	High	Low
Blacktop-----	Bedrock (lithic)	4-10	---	---	Low	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
2741:		In	In				
Blacktop-----	Bedrock (lithic)	4-10	---	---	Low	High	Low
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Tognoni-----	Bedrock (lithic)	5-14	---	---	Low	High	Low
2750:							
Silverbow-----	Duripan	8-14	4-17	---	Low	High	Low
Wardenot-----	---	---	---	---	Low	High	Low
Izo-----	---	---	---	---	Low	High	Low
2760:							
Downeyville-----	Bedrock (lithic)	4-14	---	---	Low	High	Low
Unsel-----	---	---	---	---	Low	High	Low
Tokoper-----	Bedrock (lithic)	8-15	---	---	Low	High	Low
	Duripan	8-14	0-3	---			
2770:							
Bullfor-----	Duripan	20-40	0-3	---	None	High	Low
Panor-----	---	---	---	---	None	High	High
Bluepoint-----	---	---	---	---	Low	High	High
2781:							
Haymont-----	---	---	---	---	Low	High	High
Bluepoint-----	---	---	---	---	Low	High	High
Panor-----	---	---	---	---	None	High	High
2810:							
Ashmed, moist-----	---	---	---	---	None	High	High
Yermo-----	---	---	---	---	Low	High	Low
Niavi-----	---	---	---	---	Low	High	Low
2820:							
Strozi-----	Duripan	20-40	0-3	---	None	High	Low
Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
2840:							
Armpup-----	Bedrock (paralithic)	40-60	---	---	Low	High	Moderate
Strozi-----	Duripan	20-40	0-3	---	None	High	Low
2850:							
Scottcas-----	---	---	---	---	Low	High	Moderate
Yermo-----	---	---	---	---	Low	High	Low
2860:							
Sezna-----	Petrocalcic	10-20	4-17	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low
2870:							
Kanackey-----	Bedrock (lithic)	8-14	---	---	Low	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top In	Thickness In	Hardness		Uncoated steel	Concrete
2880: Bacho-----	Duripan	8-14	4-17	---	Low	High	Low
Yermo-----	---	---	---	---	Low	High	Low
Arizo-----	---	---	---	---	Low	High	Low
2890: Nopah-----	---	---	---	---	Low	High	Moderate
Woda-----	Petrocalcic	6-20	4-17	---	None	High	Moderate
Gullied Land-----	---	---	---	---	None	---	---
2900: Playas-----	---	---	---	---	None	High	High
2901: Playas-----	---	---	---	---	None	High	High
Corbilt-----	Duripan	40-60	4-17	---	Low	High	Low
Bluepoint-----	---	---	---	---	Low	High	High
2903: Playas-----	---	---	---	---	None	High	High
Mobl-----	---	---	---	---	Low	High	Low
Kawich-----	---	---	---	---	Low	High	Low
2910: Dune Land-----	---	---	---	---	None	Low	Low
2920: Dumps-----	---	---	---	---	---	---	---
2930: Seralin-----	Bedrock (lithic)	14-20	---	---	Low	Low	High
Rock Outcrop-----	---	---	---	---	---	---	---
Sed-----	Bedrock (lithic)	20-40	---	---	Moderate	High	Low
2940: Schader-----	Bedrock (lithic)	20-40	---	Indurated	Moderate	High	Low
Sed-----	Bedrock (lithic)	20-40	---	---	Moderate	High	Low
Cruzspring-----	Bedrock (paralithic)	10-14	---	Weakly cemented	Moderate	High	Low
	Bedrock (lithic)	12-20	---	Indurated			
2950: Pits-----	---	---	---	---	---	---	---
2951: Pits-----	---	---	---	---	---	---	---
2960: Tomel-----	Duripan	10-20	4-17	---	Low	High	Low
Ardivay-----	---	---	---	---	Low	High	Low
Wardenot-----	---	---	---	---	Low	High	Low
2961: Tomel-----	Duripan	10-20	4-17	---	Low	High	Low
Breko-----	---	---	---	---	Moderate	High	Low
Wardenot-----	---	---	---	---	Low	High	Low

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
2970:							
Destazo-----	---	---	---	---	None	High	Low
Nowoy-----	---	---	---	---	None	High	Moderate
Gullied Land-----	---	---	---	---	None	---	---
2971:							
Upspring-----	Bedrock (lithic)	4-14	---	---	None	High	Low
2990:							
Lealandic-----	Duripan	20-40	4-17	---	---	High	Low
Ashmed-----	---	---	---	---	None	High	High
3021:							
Casaga-----	---	---	---	---	Moderate	High	High
Destazo-----	---	---	---	---	None	High	Low
Yurm-----	Petrocalcic	10-20	---	---	---	High	Moderate
3022:							
Casaga-----	---	---	---	---	None	High	High
Woda-----	Petrocalcic	6-20	4-17	---	None	High	Moderate
Yermo-----	---	---	---	---	Low	High	Low
3052:							
Bobnbob-----	---	---	---	---	Moderate	High	High
Caslo-----	---	---	---	---	None	High	High
3101:							
Bluepoint-----	---	---	---	---	Low	High	High
Besherm-----	---	---	---	---	Low	High	High
3120:							
Nowoy-----	---	---	---	---	None	High	Moderate
Tanazza-----	---	---	---	---	None	High	High
Yurm-----	Petrocalcic	10-20	---	---	---	High	Moderate
3150:							
Casaga-----	---	---	---	---	Moderate	High	High
3230:							
Alko-----	Duripan	5-20	4-17	---	None	High	Low
Casaga-----	---	---	---	---	None	High	High
3252:							
Bobnbob-----	---	---	---	---	Low	High	High
Cobatus-----	---	---	---	---	None	High	High
3302:							
Rumpah-----	---	---	---	---	Low	High	High
3313:							
Besherm-----	---	---	---	---	Low	High	High
3320:							
Haymont-----	---	---	---	---	Low	High	High
3333:							
Nopah-----	---	---	---	---	Low	High	Moderate

TABLE 15.--SOIL FEATURES--Continued

Map symbol and soil name	Restrictive layer				Potential for frost action	Risk of corrosion	
	Kind	Depth to top	Thickness	Hardness		Uncoated steel	Concrete
		In	In				
4010: Tanazza-----	---	---	---	---	None	High	High
Wechech-----	Petrocalcic	8-14	4-17	---	Low	High	Low
Wodavar-----	Petrocalcic	10-20	4-17	---	Low	High	Low
4030: Wechech-----	Petrocalcic	7-20	4-17	---	Low	High	Low
Nopah-----	---	---	---	---	Low	High	Moderate
Yermo-----	---	---	---	---	Low	High	Low
4060: Besherm-----	---	---	---	---	Low	High	High
Tanazza-----	---	---	---	---	None	High	High
4070: Gynelle-----	---	---	---	---	Low	High	Low
Kawich-----	---	---	---	---	Low	High	Low
Cirac-----	---	---	---	---	Low	High	High
4071: Corbilt-----	---	---	---	---	Low	High	Low
4080: Water-----	---	---	---	---	---	---	---

TABLE 16.--CLASSIFICATION OF THE SOILS

Soil name	Family or higher taxonomic class
Advokay-----	Loamy, mixed, superactive, mesic, shallow Typic Haplargids
Agon-----	Sandy, mixed, thermic Typic Haplodurids
Alko-----	Loamy, mixed, superactive, thermic, shallow Typic Haplodurids
Ardivey-----	Loamy-skeletal, mixed, superactive, mesic Durinodic Haplargids
Arizo-----	Sandy-skeletal, mixed, thermic Typic Torriorthents
Armpup-----	Fine, smectitic, thermic Typic Natrargids
Ashmed-----	Loamy-skeletal, mixed, superactive, thermic Typic Haplargids
Bacho-----	Clayey-skeletal, smectitic, thermic, shallow Typic Argidurids
Besherm-----	Fine, carbonatic, thermic Typic Haplocalcids
Blacktop-----	Loamy-skeletal, mixed, superactive, calcareous, mesic Lithic Torriorthents
Bluepoint-----	Mixed, thermic Typic Torripsamments
Bobnbob-----	Fine-silty, mixed, superactive, calcareous, thermic Aquic Torrifluvents
Boxspring-----	Loamy-skeletal, carbonatic, mesic Lithic Ustic Torriorthents
Breko-----	Loamy-skeletal, mixed, superactive, mesic Xeric Haplargids
Brier-----	Loamy-skeletal, mixed, superactive, mesic Lithic Argixerolls
Bullfor-----	Sandy, mixed, thermic Typic Haplodurids
Canoto-----	Loamy-skeletal, mixed, superactive, calcareous, thermic Typic Torriorthents
Casaga-----	Fine-loamy, mixed, superactive, thermic Typic Natrargids
Caslo-----	Fine-loamy, carbonatic, thermic Typic Fluvaquents
Cirac-----	Coarse-loamy, mixed, superactive, calcareous, mesic Typic Torrifluvents
Cobatus-----	Fine-loamy, mixed, superactive, calcareous, thermic Aeric Halaquepts
Commski-----	Loamy-skeletal, carbonatic, thermic Typic Haplocalcids
Corbilt-----	Coarse-loamy, mixed, superactive, thermic Duric Haplocalcids
Cruzspring-----	Loamy-skeletal, mixed, superactive, mesic, shallow Typic Haplargids
Dedas-----	Loamy-skeletal, mixed, superactive, thermic, shallow Typic Argidurids
Destazo-----	Loamy-skeletal, carbonatic, thermic Petronodic Haplocalcids
Downeyville-----	Loamy-skeletal, mixed, superactive, mesic Lithic Haplargids
Espint-----	Clayey, smectitic, mesic, shallow Xeric Haplargids
Fang-----	Coarse-loamy, mixed, superactive, calcareous, mesic Typic Torriorthents
Ferrogold-----	Loamy-skeletal, carbonatic, thermic, shallow Calcic Petrocalcids
Fuegosta-----	Clayey, smectitic, mesic, shallow Abruptic Argidurids
Gabbvally-----	Loamy-skeletal, mixed, superactive, mesic Lithic Xeric Haplargids
Greyeagle-----	Loamy-skeletal, mixed, superactive, thermic, shallow Typic Haplodurids
Gynelle-----	Sandy-skeletal, mixed, mesic Typic Torriorthents
Haleburu-----	Loamy-skeletal, mixed, superactive, calcareous, thermic Lithic Torriorthents
Haymont-----	Coarse-silty, mixed, superactive, calcareous, thermic Typic Torriorthents
Irongold-----	Loamy, mixed, superactive, thermic, shallow Typic Petrocalcids
Izo-----	Sandy-skeletal, mixed, mesic Typic Torriorthents
Jonnic-----	Clayey-skeletal, smectitic, thermic Xeric Argidurids
Kanackey-----	Clayey-skeletal, smectitic, thermic Lithic Haplargids
Kawich-----	Mixed, mesic Typic Torripsamments
Lastchance-----	Loamy-skeletal, carbonatic, thermic Calcic Petrocalcids
Laxal-----	Loamy-skeletal, mixed, superactive, mesic Durinodic Haplocalcids
Lealandic-----	Clayey-skeletal, smectitic, thermic Typic Argidurids
Leo-----	Sandy-skeletal, mixed, mesic Typic Torriorthents
Lewdlac-----	Loamy, mixed, superactive, thermic, shallow Cambidic Haplodurids
Lidan-----	Clayey-skeletal, smectitic, mesic Abruptic Argidurids
Longjim-----	Loamy-skeletal, mixed, superactive, thermic, shallow Typic Haplodurids
Louderback-----	Sandy, mixed, mesic Oxyaquic Torriorthents
Luning-----	Sandy, mixed, mesic Typic Torriorthents
Migern-----	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, thermic Durinodic Haplargids
Mobl-----	Coarse-loamy, mixed, superactive, thermic Typic Natrargids
Naye-----	Loamy-skeletal, carbonatic, thermic Typic Petrocalcids
Niavi-----	Sandy-skeletal, mixed, thermic Typic Haplocalcids
Nickel-----	Loamy-skeletal, mixed, superactive, thermic Typic Haplocalcids
Nopah-----	Fine-silty, carbonatic, thermic Typic Torriorthents
Nowoy-----	Fine-loamy, carbonatic, thermic Typic Haplocalcids
Orwash-----	Sandy, mixed, thermic Typic Torriorthents
Pahrump-----	Loamy-skeletal, carbonatic, thermic Petronodic Haplocalcids
Panor-----	Fine-loamy, mixed, superactive, calcareous, thermic Typic Torriorthents
Papoose-----	Fine-loamy, mixed, superactive, mesic Typic Haplargids
Pinez-----	Loamy-skeletal, mixed, superactive, thermic Durinodic Haplargids
Pintwater-----	Loamy-skeletal, mixed, superactive, calcareous, mesic Lithic Torriorthents

Table 16.--Classification of the Soils--Continued

Soil name	Family or higher taxonomic class
Purob-----	Loamy-skeletal, carbonatic, mesic, shallow Calcic Petrocalcids
Rumpah-----	Fine, smectitic, thermic Sodic Haplotorrerts
Sanwell-----	Loamy-skeletal, mixed, superactive, calcareous, thermic Duric Torriorthents
Schader-----	Loamy-skeletal, mixed, superactive, mesic Xeric Haplargids
Scottcas-----	Loamy-skeletal, mixed, superactive, thermic Durinodic Haplargids
Sed-----	Loamy-skeletal, mixed, superactive, mesic Ustic Haplargids
Seralin-----	Loamy-skeletal, mixed, superactive, mesic Lithic Haplustolls
Sezna-----	Loamy-skeletal, mixed, superactive, thermic, shallow Argic Petrocalcids
Shamock-----	Coarse-loamy, mixed, superactive, thermic Typic Haplodurids
Shorim-----	Loamy-skeletal, mixed, superactive, thermic Typic Haplodurids
Silverbow-----	Loamy-skeletal, mixed, superactive, mesic, shallow Typic Argidurids
Skelon-----	Loamy-skeletal, mixed, superactive, thermic Typic Haplodurids
St. Thomas-----	Loamy-skeletal, carbonatic, thermic Lithic Torriorthents
Stargo-----	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, calcareous, mesic Duric Torrifluvents
Stewval-----	Loamy-skeletal, mixed, superactive, mesic Lithic Xeric Haplargids
Stonell-----	Loamy-skeletal, mixed, superactive, mesic Typic Haplargids
Stonewall-----	Clayey-skeletal, smectitic, mesic Typic Paleargids
Strozi-----	Fine-loamy, mixed, superactive, thermic Argidic Argidurids
Tanazza-----	Fine-silty, gypsic, thermic Typic Calcigypsid
Tecopa-----	Loamy-skeletal, mixed, superactive, calcareous, thermic Lithic Torriorthents
Tognoni-----	Loamy-skeletal, mixed, superactive, mesic Lithic Haplargids
Tokoper-----	Loamy-skeletal, mixed, superactive, mesic, shallow Typic Argidurids
Tomel-----	Loamy-skeletal, mixed, superactive, mesic, shallow Typic Argidurids
Unsel-----	Fine-loamy, mixed, superactive, mesic Durinodic Haplargids
Upspring-----	Loamy-skeletal, mixed, superactive, calcareous, thermic Lithic Torriorthents
Vace-----	Loamy, mixed, superactive, thermic, shallow Typic Petrocalcids
Veet-----	Loamy-skeletal, mixed, superactive, mesic Xeric Haplocambids
Vigus-----	Fine-loamy, mixed, superactive, mesic Durinodic Haplargids
Vindicator-----	Loamy-skeletal, mixed, superactive, mesic, shallow Typic Haplargids
Wahguyhe-----	Loamy-skeletal, mixed, superactive, nonacid, mesic Lithic Xeric Torriorthents
Wanomie-----	Coarse-loamy, mixed, superactive, thermic Cambidic Haplodurids
Wardenot-----	Sandy-skeletal, mixed, mesic Typic Torriorthents
Wechech-----	Loamy-skeletal, carbonatic, thermic, shallow Calcic Petrocalcids
Weiser-----	Loamy-skeletal, carbonatic, thermic Typic Haplocalcids
Wilst-----	Loamy-skeletal, mixed, superactive, calcareous, thermic Duric Torriorthents
Woda-----	Loamy, carbonatic, thermic, shallow Calcic Petrocalcids
Wodavar-----	Loamy-skeletal, carbonatic, thermic, shallow Calcic Petrocalcids
Yermo-----	Loamy-skeletal, mixed, superactive, calcareous, thermic Typic Torriorthents
Yurm-----	Loamy-skeletal, mixed, superactive, thermic, shallow Calcic Petrocalcids
Zalda-----	Loamy, mixed, superactive, thermic, shallow Typic Haplodurids
Zeheme-----	Loamy-skeletal, carbonatic, thermic Lithic Haplocalcids
Zibate-----	Loamy-skeletal, mixed, superactive, thermic Lithic Haplargids
Zyplar-----	Loamy, mixed, superactive, thermic Lithic Haplargids



United States
Department of
Agriculture

Natural
Resources
Conservation
Service

In cooperation with
United States
Department of
Interior, Bureau of Land
Management; and
University of Nevada
Agricultural
Experiment Station

Soil Survey of Nye County, Nevada, Southwest Part Part II - Volume II

RANGELAND PLANTS AND WOODLAND UNDERSTORY

1314--WEISER-WECECH ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		WEISER	WECECH	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-8	2-8	2-8	2-5	---
big galleta	HIRI	2-8	2-8	---	40-50	5-10
bush muhly	MUPO2	---	---	---	5-15	1-5
desert needlegrass	STSP3	---	---	---	2-5	---
Cooper wolfberry	LYCO2	---	---	2-5	---	---
Nevada ephedra	EPNE	---	---	---	---	1-5
baccharis	BACCH	---	---	---	---	5-15
bursage	FRANS*	---	---	---	---	5-20
creosotebush	LATR2	5-10	5-10	10-20	2-5	5-20
ephedra	EPHE2	5-10	5-10	---	---	---
erigonum	ERIOG	---	---	---	---	1-5
range ratany	KRPA	2-5	2-5	---	2-5	---
shadscale	ATCO	---	---	15-25	---	---
spiny menodora	MESP2	T-5	T-5	---	5-15	---
white burrobrush	HYSA	---	---	---	---	2-5
white bursage	AMDU2	20-30	20-30	30-40	5-15	---
winterfat	EULA5	10-20	10-20	---	---	---
Range site number		030XB102NV	030XB102NV	030XA066NV	030XB075NV	030XB028NV
Potential production (lb/acre):						
Favorable years		500	500	350	800	500
Normal years		350	350	200	600	350
Unfavorable years		200	200	100	400	200

1315--LASTCHANCE-COMMSKI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		LASTCHANCE	LASTCHANCE	COMMSKI	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	T-5	2-5	2-5	2-5	1-5	T-5
desert needlegrass	STSP3	T-8	5-10	5-10	2-5	1-5	T-5
Nevada dalea	PSPO	---	---	---	---	2-5	---
Nevada ephedra	EPNE	---	---	---	2-5	---	T-5
blackbrush	CORA	---	---	---	50-70	---	---
bladdersage	SAME	---	---	---	---	5-10	---
cattle saltbush	ATPO	---	---	---	---	5-10	---
creosotebush	LATR2	10-25	2-8	2-8	---	15-25	5-10
desert pepperweed	LEFR2	---	---	---	1-5	---	---
range ratany	KRPA	---	2-5	2-5	---	---	2-5
spiny menodora	MESP2	---	---	---	1-5	---	---
white burrobrush	HYSA	---	---	---	---	5-10	---
white bursage	AMDU2	30-45	20-30	20-30	---	5-10	25-50
winterfat	EULA5	---	5-15	5-15	---	---	---
wolfberry	LYCIU	---	---	---	---	2-5	---
Range site number		030XA058NV	030XA007NV	030XA007NV	030XA094NV	030XA076NV	030XA071NV
Potential production (lb/acre):							
Favorable years		350	500	500	450	600	500
Normal years		200	350	350	300	400	300
Unfavorable years		100	200	200	150	200	200

1316--LASTCHANCE-FERROGOLD-COMMSKI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions						
		Soil name or Inclusion number--						
		LASTCHANCE	FERROGOLD	COMMSKI	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	2-5	2-5	2-5	T-5	1-5	T-5	2-5
big galleta	HIRI	---	---	---	2-10	---	---	5-15
desert needlegrass	STSP3	5-10	2-5	5-10	2-8	1-5	T-5	---
Anderson wolfberry	LYAN	---	---	---	2-5	---	---	---
Mojave buckwheat	ERFAP	---	---	---	5-10	---	---	---
Nevada dalea	PSPO	---	---	---	---	2-5	---	---
Nevada ephedra	EPNE	---	2-5	---	---	---	T-5	---
Virgin River encelia	ENFRV	---	---	---	2-8	---	---	---
blackbrush	CORA	---	50-70	---	---	---	---	60-70
bladdersage	SAME	---	---	---	---	5-10	---	---
cattle saltbush	ATPO	---	---	---	---	5-10	---	---
creosotebush	LATR2	2-8	---	2-8	2-8	15-25	5-10	2-5
desert pepperweed	LEFR2	---	1-5	---	---	---	---	---
ephedra	EPHED	---	---	---	5-10	---	---	---
range ratany	KRPA	2-5	---	2-5	2-5	---	2-5	---
spiny menodora	MESP2	---	1-5	---	2-5	---	---	---
white brittlebush	ENFA	---	---	---	T-8	---	---	---
white burrobrush	HYSA	---	---	---	2-5	5-10	---	---
white bursage	AMDU2	20-30	---	20-30	35-45	5-10	25-50	T-8
winterfat	EULA5	5-15	---	5-15	---	---	---	---
wolfberry	LYCIU	---	---	---	---	2-5	---	---

Range site number	030XA007NV	030XA094NV	030XA007NV	030XB134NV	030XA076NV	030XA071NV	030XB029NV
Potential production (lb/acre):							
Favorable years	500	450	500	700	600	500	500
Normal years	350	300	350	500	400	300	350
Unfavorable years	200	150	200	300	200	200	250

1317--COMMSKI-LASTCHANCE ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		COMMSKI	LASTCHANCE	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	T-5	T-5	1-5	T-5	T-5
desert needlegrass	STSP3	T-8	T-8	1-5	---	T-5
Nevada dalea	PSPO	---	---	2-5	---	---
Nevada ephedra	EPNE	---	---	---	---	T-5
bladdersage	SAME	---	---	5-10	---	---
cattle saltbush	ATPO	---	---	5-10	---	---
creosotebush	LATR2	10-25	10-25	15-25	50-70	5-10
desert pepperweed	LEFR2	---	---	---	2-10	---
range ratany	KRPA	---	---	---	---	2-5
white burrobrush	HYSA	---	---	5-10	---	---
white bursage	AMDU2	30-45	30-45	5-10	2-8	25-50
wolfberry	LYCIU	---	---	2-5	---	---

Range site number	030XA058NV	030XA058NV	030XA076NV	030XA073NV	030XA071NV
Potential production (lb/acre):					
Favorable years	350	350	600	200	500
Normal years	200	200	400	100	300
Unfavorable years	100	100	200	50	200

1320--BOXSPRING-ZEHEME-ROCK OUTCROP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		BOXSPRING	ZEHEME	ROCK OUTCROP	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-3	---	---	---	2-5
big galleta	HIRI	---	---	---	2-5	5-15
desert needlegrass	STSP3	2-8	---	---	2-5	---
needlegrass	STIPA	---	2-8	---	---	---
Nevada ephedra	EPNE	2-5	---	---	2-5	---
Stansbury cliffrose	COMES	T-8	---	---	---	---
Utah agave	AGUT	---	2-5	---	---	---
blackbrush	CORA	60-75	T-5	---	60-85	60-70
creosotebush	LATR2	---	T-5	---	---	2-5
desert bitterbrush	PUGL2	2-8	---	---	---	---
ephedra	EPHED	2-5	T-5	---	---	---
white bursage	AMDU2	---	---	---	---	T-8
Range site number		029XY077NV	030XB068NV	none	030XB030NV	030XB029NV
Potential production (lb/acre):						
Favorable years		700	250		300	500
Normal years		500	150		200	350
Unfavorable years		300	100		150	250

1321--BOXSPRING-SERALIN-ROCK OUTCROP ASSOCIATION

(An X indicates that the named plant is in the potential native woodland understory and the percentage is highly variable. Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		BOXSPRING	SERALIN	ROCK OUTCROP	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-3	---	---	---	---
desert needlegrass	STSP3	2-8	---	---	---	X
galleta	HIJA	---	---	---	---	X
muttongrass	POFE	---	X	---	X	X
sideoats grama	BOCU	---	---	---	---	X
turbinella oak	QUTU2	---	X	---	X	---
Nevada ephedra	EPNE	2-5	---	---	---	---
Stansbury cliffrose	COMES	T-8	X	---	X	X
Banana yucca	YUBA	---	X	---	X	X
blackbrush	CORA	60-75	---	---	---	X
black sagebrush	ARARN	---	X	---	X	---
broom snakeweed	GUSA2	---	X	---	X	---
desert bitterbrush	PUGL2	2-8	---	---	---	X
ephedra	EPHED	2-5	---	---	---	---
pricklypear	OPUNT	---	X	---	X	X
singleleaf pinyon	PIMO	---	X	---	X	X
yellowleaf silktassel	GAFL2	---	X	---	X	---
Range site number		029XY077NV	029XY135NV	none	029XY135NV	029XY126NV
Potential production (lb/acre):						
Favorable years		700	600		600	500
Normal years		500	450		450	400
Unfavorable years		300	300		300	250

1340--LONGJIM-NIAVI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		LONGJIM	NIAVI	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	2-8	T-5	1-5	2-8	---	1-5
big galleta	HIRI	---	2-10	---	2-8	2-10	2-10
bush muhly	MUPO2	---	---	---	---	---	T-5
desert needlegrass	STSP3	2-8	2-8	1-5	---	2-10	2-8
Anderson wolfberry	LYAN	---	2-5	---	---	---	---
Mojave buckwheat	ERFAP	2-5	5-10	---	---	---	---
Nevada dalea	PSPO	---	---	2-5	---	---	---
Shockley goldenhead	ACSH	---	---	---	---	2-5	---
Virgin River enceliaa	ENFRV	---	2-8	---	---	---	---
blackbrush	CORA	30-45	---	---	---	40-50	40-60
bladdersage	SAME	---	---	5-10	---	---	---
cattle saltbush	ATPO	---	---	5-10	---	---	---
creosotebush	LATR2	---	2-8	15-25	5-10	---	2-5
desert senna	CAAR10	---	---	---	---	2-8	---
ephedra	EPHED	2-5	5-10	---	5-10	---	---
fourwing saltbush	ATCA2	---	---	---	---	2-8	---
range ratany	KRPA	2-5	2-5	---	2-5	---	---
spiny hopsage	GRSP	---	---	---	---	2-5	---
spiny menodora	MESP2	2-5	2-5	---	T-5	2-5	---
white brittlebush	ENFA	---	T-8	---	---	---	---
white burrobrush	HYSA	---	2-5	5-10	---	---	---
white bursage	AMDU2	15-30	35-45	5-10	20-30	---	---
winterfat	EULA5	---	---	---	10-20	2-8	---
wolfberry	LYCTU	---	---	2-5	---	---	---

Range site number	030XA093NV	030XB134NV	030XA076NV	030XB102NV	030XB108NV	030XB076NV
Potential production (lb/acre):						
Favorable years	450	700	600	500	800	300
Normal years	300	500	400	350	600	200
Unfavorable years	150	300	200	200	400	75

1871--IRONGOLD-WECHECH ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions						
		Soil name or Inclusion number--						
		IRONGOLD	IRONGOLD	WEISER	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	2-5	2-5	2-8	2-8	1-3	---	---
big galleta	HIRI	5-15	5-15	2-8	30-50	---	T-8	5-10
bush muhly	MUPO2	---	---	---	---	---	---	1-5
desert needlegrass	STSP3	---	---	---	---	2-8	---	---
Nevada ephedra	EPNE	---	---	---	---	2-5	T-5	1-5
Stansbury cliffrose	COMES	---	---	---	---	T-8	---	---
baccharis	BACCH	---	---	---	---	---	---	5-15
blackbrush	CORA	60-70	60-70	---	30-50	60-75	---	---
bursage	FRANS*	---	---	---	---	---	---	5-20
creosotebush	LATR2	2-5	2-5	5-10	---	---	10-25	5-20
desert bitterbrush	PUGL2	---	---	---	---	2-8	---	---
ephedra	EPHED	---	---	5-10	---	2-5	---	---
erigonum	ERIOG	---	---	---	---	---	---	1-5
range ratany	KRPA	---	---	2-5	---	---	2-5	---
spiny menodora	MESP2	---	---	T-5	---	---	---	---
white burrobrush	HYSA	---	---	---	---	---	---	2-5
white bursage	AMDU2	T-8	T-8	20-30	---	---	25-50	---
winterfat	EULA5	---	---	10-20	2-5	---	---	---

Range site number	030XB029NV	030XB029NV	030XB102NV	030XB107NV	029XY077NV	030XB005NV	030XB028NV
Potential production (lb/acre):							
Favorable years	500	500	500	1000	700	500	500
Normal years	350	350	350	800	500	300	350
Unfavorable years	250	250	200	600	300	200	200

2002--ROCK OUTCROP-UPSPRING-RUBBLE LAND COMPLEX, 8 TO 75 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		ROCK OUTCROP	UPSPRING	RUBBLE LAND	Inclusion 1
desert needlegrass	STSP3	---	1-5	---	---
creosotebush	LATR2	---	25-45	---	5-15
shadscale	ATCO	---	---	---	40-60
white burrobrush	HYSB	---	5-10	---	---
white bursage	AMDU2	---	10-25	---	2-10
Range site number		none	030XA067NV	none	030XA056NV
Potential production (lb/acre):					
Favorable years			125		150
Normal years			75		100
Unfavorable years			25		25

2004--ROCK OUTCROP-ZYPLAR ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		ROCK OUTCROP	ZYPLAR	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	---	1-5	10-15	20-35
Sandberg bluegrass	POSE	---	---	2-5	---
desert needlegrass	STSP3	---	1-5	2-8	2-8
galleta	HLJA	---	---	2-8	---
needleandthread	STCO4	---	---	15-25	5-15
Nevada ephedra	EPNE	---	2-5	---	2-5
Wyoming big sagebrush	ARTRW	---	---	30-35	25-35
blackbrush	CORA	---	60-80	---	---
ephedra	EPHED	---	---	2-8	---
fourwing saltbush	ATCA2	---	---	2-5	2-5
winterfat	EULA5	---	1-5	---	---
Range site number		none	030XA095NV	029XY010NV	029XY006NV
Potential production (lb/acre):					
Favorable years			300	500	800
Normal years			175	350	600
Unfavorable years			75	250	300

2005--ROCK OUTCROP-ST. THOMAS ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions						
		Soil name or Inclusion number--						
		ROCK OUTCROP	ST. THOMAS	ST. THOMAS	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	---	---	---	---	1-5	---	---
big galleta	HIRI	---	---	T-5	---	---	---	---
desert needlegrass	STSP3	---	---	---	---	1-5	---	---
fluffgrass	ERPUS	---	2-5	2-5	---	---	---	---
cattle saltbush	ATPO	---	---	---	---	5-15	---	---
creosotebush	LATR2	---	75-90	5-20	65-80	20-30	65-80	5-15
desert pepperweed	LEFR2	---	---	T-5	---	---	---	---
ephedra	EPHED	---	---	T-10	---	2-10	---	---
range ratany	KRPA	---	---	2-5	---	---	---	---
ratany	KRAME	---	---	---	T-5	---	T-5	---
shadscale	ATCO	---	---	---	---	---	---	40-60
white burrobrush	HYSA	---	---	---	---	10-20	---	---
white bursage	AMDU2	---	2-15	50-60	5-25	2-8	5-25	2-10
Range site number		none	030XB017NV	030XB001NV	030XB019NV	030XA065NV	030XB019NV	030XA056NV
Potential production (lb/acre):								
Favorable years			125	350	225	350	225	150
Normal years			75	250	150	150	150	100
Unfavorable years			25	100	100	75	100	25

2010--LONGJIM GRAVELLY FINE SANDY LOAM, 4 TO 15 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions	
		Soil name or Inclusion number--	
		LONGJIM	Inclusion 1
Indian ricegrass	ORHY	2-5	---
big galleta	HIRI	---	T-8
desert needlegrass	STSP3	2-5	---
Nevada ephedra	EPNE	2-5	T-5
blackbrush	CORA	50-70	---
creosotebush	LATR2	---	10-25
desert pepperweed	LEFR2	1-5	---
range ratany	KRPA	---	2-5
spiny menodora	MESP2	1-5	---
white bursage	AMDU2	---	25-50
Range site number		030XA094NV	030XB005NV
Potential production (lb/acre):			
Favorable years		450	500
Normal years		300	300
Unfavorable years		150	200

2011--SANWELL, WARM-SANWELL COMPLEX, 0 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		SANWELL	SANWELL	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	T-5	2-8	T-5	T-5	5-10
desert needlegrass	STSP3	T-8	---	T-8	T-8	5-10
sand dropseed	SPCR	---	---	---	---	5-10
Cooper wolfberry	LYCO2	---	2-5	---	---	---
creosotebush	LATR2	10-25	10-20	10-25	10-25	10-20
fourwing saltbush	ATCA2	---	---	---	---	10-15
shadscale	ATCO	---	15-25	---	---	---
white bursage	AMDU2	30-45	30-40	30-45	30-45	5-10
winterfat	EULA5	---	---	---	---	10-15
Range site number		030XA058NV	030XA066NV	030XA058NV	030XA058NV	030XA069NV
Potential production (lb/acre):						
Favorable years		350	350	350	350	400
Normal years		200	200	200	200	250
Unfavorable years		100	100	100	100	100

2012--ZALDA-GREYEAGLE-UPSPRING ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		ZALDA	GREYEAGLE	UPSPRING	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-8	2-8	2-5	T-5	2-10	---
desert needlegrass	STSP3	5-10	---	2-5	T-8	2-8	---
Anderson wolfberry	LYAN	---	---	5-10	---	---	---
Cooper wolfberry	LYCO2	---	2-5	---	---	---	---
Nevada sphaedra	EPNE	2-8	---	2-5	---	1-5	---
creosotebush	LATR2	10-20	10-20	10-20	10-25	25-45	---
shadscale	ATCO	20-35	15-25	10-25	---	---	---
spiny menodora	MESP2	---	---	5-15	---	---	---
white bursage	AMDU2	10-15	30-40	5-10	30-45	15-25	---
Range site number		030XA059NV	030XA066NV	030XA068NV	030XA058NV	030XA054NV	none
Potential production (lb/acre):							
Favorable years		250	350	250	350	250	
Normal years		150	200	150	200	150	
Unfavorable years		50	100	50	100	50	

2013--LONGJIM-YURM ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		LONGJIM	YURM	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	2-8	2-5	T-5	2-5	1-5	T-5
big galleta	HIRI	---	---	2-10	5-15	2-10	---
bush muhly	MUPO2	---	---	---	---	T-5	---
desert needlegrass	STSP3	2-8	5-10	2-8	---	2-8	T-5
Anderson wolfberry	LYAN	---	---	2-5	---	---	---
Mojave buckwheat	ERFAP	2-5	---	5-10	---	---	---
Nevada ephedra	EPNE	---	---	---	---	---	T-5
Virgin River enceliaa	ENFRV	---	---	2-8	---	---	---
blackbrush	CORA	30-45	---	---	60-70	40-60	---
creosotebush	LATR2	---	2-8	2-8	2-5	2-5	5-10
ephedra	EPHED	2-5	---	5-10	---	---	---
range ratany	KRPA	2-5	2-5	2-5	---	---	2-5
spiny menodora	MESP2	2-5	---	2-5	---	---	---
white brittlebush	ENFA	---	---	T-8	---	---	---
white burrobrush	HYSA	---	---	2-5	---	---	---
white bursage	AMDU2	15-30	20-30	35-45	T-8	---	25-50
winterfat	EULAS	---	5-15	---	---	---	---

Range site number	030XA093NV	030XA007NV	030XB134NV	030XB029NV	030XB076NV	030XA071NV
Potential production (lb/acre):						
Favorable years	450	500	700	500	300	500
Normal years	300	350	500	350	200	300
Unfavorable years	150	200	300	250	75	200

2020--WEISER-CANOTO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		WEISER	CANOTO	Inclusion 1
big galleta	HIRI	T-8	T-8	T-8
Nevada ephedra	EPNE	T-5	T-5	T-5
creosotebush	LATR2	10-25	10-25	10-25
range ratany	KRPA	2-5	2-5	2-5
white bursage	AMDU2	25-50	25-50	25-50

Range site number	030XB005NV	030XB005NV	030XB005NV
Potential production (lb/acre):			
Favorable years	500	500	500
Normal years	300	300	300
Unfavorable years	200	200	200

2021--WEISER-NICKEL ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		WEISER	NICKEL	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	---	---	---	1-5
big galleta	HIRI	T-8	T-8	T-8	---
desert needlegrass	STSP3	---	---	---	1-5
Nevada dalea	PSPO	---	---	---	2-5
Nevada ephedra	EPNE	T-5	T-5	T-5	---
bladdersage	SAME	---	---	---	5-10
cattle saltbush	ATPO	---	---	---	5-10
creosotebush	LATR2	10-25	10-25	10-25	15-25
range ratany	KRPA	2-5	2-5	2-5	---
white burrobrush	HYSA	---	---	---	5-10
white bursage	AMDU2	25-50	25-50	25-50	5-10
wolfberry	LYCIU	---	---	---	2-5
Range site number		030XB005NV	030XB005NV	030XB005NV	030XA076NV
Potential production (lb/acre):					
Favorable years		500	500	500	600
Normal years		300	300	300	400
Unfavorable years		200	200	200	200

2023--COMMSKI-SEZNA ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		COMMSKI	COMMSKI	SEZNA	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-5	2-8	T-5	T-5	---
desert needlegrass	STSP3	T-8	---	T-8	T-8	---
Cooper wolfberry	LYCO2	---	2-5	---	---	---
creosotebush	LATR2	10-25	10-20	10-25	10-25	---
shadscale	ATCO	---	15-25	---	---	---
white bursage	AMDU2	30-45	30-40	30-45	30-45	---
Range site number		030XA058NV	030XA066NV	030XA058NV	030XA058NV	none
Potential production (lb/acre):						
Favorable years		350	350	350	350	
Normal years		200	200	200	200	
Unfavorable years		100	100	100	100	

2030--CORBILT GRAVELLY FINE SANDY LOAM, WARM, 2 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		CORBILT	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-5	T-5	T-5
creosotebush	LATR2	50-70	50-70	50-70
desert pepperweed	LEFR2	2-10	2-10	2-10
white bursage	AMDU2	2-8	2-8	2-8
Range site number		030XA073NV	030XA073NV	030XA073NV
Potential production (lb/acre):				
Favorable years		200	200	200
Normal years		100	100	100
Unfavorable years		50	50	50

2031--CORBILT-SKELON ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		CORBILT	SKELON	Inclusion 1
Indian ricegrass	ORHY	T-5	T-5	T-5
creosotebush	LATR2	50-70	50-70	50-70
desert pepperweed	LEFR2	2-10	2-10	2-10
white bursage	AMDU2	2-8	2-8	2-8
Range site number		030XA073NV	030XA073NV	030XA073NV
Potential production (lb/acre):				
Favorable years		200	200	200
Normal years		100	100	100
Unfavorable years		50	50	50

2040--YURM-CANOTO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		YURM	CANOTO	Inclusion 1
Indian ricegrass	ORHY	1-5	---	---
big galleta	HIRI	---	T-8	5-10
bush muhly	MUPO2	---	---	1-5
Nevada ephedra	EPNE	---	T-5	1-5
baccharis	BACCH	---	---	5-15
bursage	FRANS*	---	---	5-20
creosotebush	LATR2	30-50	10-25	5-20
erigonum	ERIOG	---	---	1-5
range ratany	KRPA	---	2-5	---
shadscale	ATCO	10-30	---	---
white burrobrush	HYSA	---	---	2-5
white bursage	AMDU2	---	25-50	---
Range site number		030XA047NV	030XB005NV	030XB028NV
Potential production (lb/acre):				
Favorable years		75	500	500
Normal years		50	300	350
Unfavorable years		25	200	200

2050--CANOTO-NAYE ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		CANOTO	NAYE	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	---	---	---	2-8
big galleta	HIRI	T-8	T-8	5-10	5-10
black grama	BOER4	---	---	---	10-20
bush muhly	MUPO2	---	---	1-5	---
desert needlegrass	STSP3	---	---	---	2-8
galleta	HIJA	---	---	---	T-5
Nevada ephedra	EPNE	T-5	T-5	1-5	2-5
baccharis	BACCH	---	---	5-15	---
blackbrush	CORA	---	---	---	40-60
bursage	FRANS*	---	---	5-20	---
creosotebush	LATR2	10-25	10-25	5-20	---
erigonum	ERIOG	---	---	1-5	---
range ratany	KRPA	2-5	2-5	---	---
white burrobrush	HYSA	---	---	2-5	---
white bursage	AMDU2	25-50	25-50	---	---
Range site number		030XB005NV	030XB005NV	030XB028NV	030XB014NV
Potential production (lb/acre):					
Favorable years		500	500	500	700
Normal years		300	300	350	500
Unfavorable years		200	200	200	250

2051--YERMO-WODA-NOWOY ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		YERMO	WODA	NOWOY	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-5	1-5	1-5	2-15	1-5
California bearpoppy	ARCA4	---	2-8	2-8	---	2-8
catclaw	ACGR	---	---	---	1-10	---
creosotebush	LATR2	50-70	---	---	---	---
desert pepperweed	LEFR2	2-10	---	---	---	---
desertholly	ATHY	---	20-45	20-45	---	20-45
fourwing saltbush	ATCA2	---	---	---	25-40	---
mesquite	PROSO	---	---	---	25-45	---
seepweed	SUAED	---	10-20	10-20	---	10-20
white bursage	AMDU2	2-8	---	---	---	---
wolfberry	LYCIU	---	5-15	5-15	---	5-15
Range site number		030XA073NV	030XA060NV	030XA060NV	030XY045NV	030XA060NV
Potential production (lb/acre):						
Favorable years		200	100	100	1500	100
Normal years		100	50	50	900	50
Unfavorable years		50	25	25	500	25

2052--CANOTO VERY GRAVELLY SANDY LOAM, 2 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		CANOTO	Inclusion 1	Inclusion 2
big galleta	HIRI	T-8	---	5-10
bush muhly	MUPO2	---	---	1-5
Nevada ephedra	EPNE	T-5	---	1-5
baccharis	BACCH	---	---	5-15
bursage	FRANS*	---	---	5-20
creosotebush	LATR2	10-25	65-80	5-20
erigonum	ERIOG	---	---	1-5
range ratany	KRPA	2-5	---	---
ratany	KRAME	---	T-5	---
white burrobrush	HYSA	---	---	2-5
white bursage	AMDU2	25-50	5-25	---
Range site number		030XB005NV	030XB019NV	030XB028NV
Potential production (lb/acre):				
Favorable years		500	225	500
Normal years		300	150	350
Unfavorable years		200	100	200

2053--YERMO-GREYEAGLE-ARIZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		YERMO	GREYEAGLE	ARIZO	Inclusion 1
Indian ricegrass	ORHY	T-5	2-8	1-5	T-5
desert needlegrass	STSP3	T-8	---	1-5	T-8
Cooper wolfberry	LYCO2	---	2-5	---	---
Nevada dalea	PSPO	---	---	2-5	---
bladdersage	SAME	---	---	5-10	---
cattle saltbush	ATPO	---	---	5-10	---
creosotebush	LATR2	10-25	10-20	15-25	10-25
shadscale	ATCO	---	15-25	---	---
white burrobrush	HYSA	---	---	5-10	---
white bursage	AMDU2	30-45	30-40	5-10	30-45
wolfberry	LYCIU	---	---	2-5	---

Range site number	030XA058NV	030XA066NV	030XA076NV	030XA058NV
Potential production (lb/acre):				
Favorable years	350	350	600	350
Normal years	200	200	400	200
Unfavorable years	100	100	200	100

2054--YERMO, HOT-YERMO-ARIZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions						
		Soil name or Inclusion number--						
		YERMO	YERMO	ARIZO	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	T-5	T-5	1-5	T-5	T-5	T-5	T-5
desert needlegrass	STSP3	---	T-8	1-5	---	---	T-8	---
cattle saltbush	ATPO	---	---	5-15	---	---	---	---
creosotebush	LATR2	50-70	10-25	20-30	50-70	50-70	10-25	50-70
desert pepperweed	LEFR2	2-10	---	---	2-10	2-10	---	2-10
ephedra	EPHED	---	---	2-10	---	---	---	---
white burrobrush	HYSA	---	---	10-20	---	---	---	---
white bursage	AMDU2	2-8	30-45	2-8	2-8	2-8	30-45	2-8

Range site number	030XA073NV	030XA058NV	030XA065NV	030XA073NV	030XA073NV	030XA058NV	030XA073NV
Potential production (lb/acre):							
Favorable years	200	350	350	200	200	350	200
Normal years	100	200	150	100	100	200	100
Unfavorable years	50	100	75	50	50	100	50

2055--CANOTO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		CANOTO	CANOTO	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	---	2-5	T-5	---	1-5	2-5
big galleta	HIRI	T-8	40-50	2-10	5-10	---	5-15
bush muhly	MUPO2	---	5-15	---	1-5	---	---
desert needlegrass	STSP3	---	2-5	2-8	---	---	---
Anderson wolfberry	LYAN	---	---	2-5	---	---	---
Mojave buckwheat	ERFAP	---	---	5-10	---	---	---
Nevada ephedra	EPNE	T-5	---	---	1-5	---	---
Virgin River enceliaa	ENFRV	---	---	2-8	---	---	---
baccharis	BACCH	---	---	---	5-15	---	---
blackbrush	CORA	---	---	---	---	---	60-70
bursage	FRANS*	---	---	---	5-20	---	---
creosotebush	LATR2	10-25	2-5	2-8	5-20	30-50	2-5
ephedra	EPHED	---	---	5-10	---	---	---
erigonum	ERIOG	---	---	---	1-5	---	---
range ratany	KRPA	2-5	2-5	2-5	---	---	---
shadscale	ATCO	---	---	---	---	10-30	---
spiny manodora	MESP2	---	5-15	2-5	---	---	---
white brittlebush	ENFA	---	---	T-8	---	---	---
white burrobrush	HYSA	---	---	2-5	2-5	---	---
white bursage	AMDU2	25-50	5-15	35-45	---	---	T-8

Range site number	030XB005NV	030XB075NV	030XB134NV	030XB028NV	030XA047NV	030XB029NV
Potential production (lb/acre):						
Favorable years	500	800	700	500	75	500
Normal years	300	600	500	350	50	350
Unfavorable years	200	400	300	200	25	250

2057--YERMO-COMMSKI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		YERMO	COMMSKI	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-5	T-5	T-5	1-5
desert needlegrass	STSP3	---	---	---	1-5
cattle saltbush	ATPO	---	---	---	5-15
creosotebush	LATR2	50-70	50-70	50-70	20-30
desert pepperweed	LEFR2	2-10	2-10	2-10	---
ephedra	EPHED	---	---	---	2-10
white burrobrush	HYSA	---	---	---	10-20
white bursage	AMDU2	2-8	2-8	2-8	2-8

Range site number	030XA073NV	030XA073NV	030XA073NV	030XA065NV
Potential production (lb/acre):				
Favorable years	200	200	200	350
Normal years	100	100	100	150
Unfavorable years	50	50	50	75

2058--CANOTO-NICKEL ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		CANOTO	NICKEL	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	---	---	1-5	1-5
big galleta	HIRI	T-8	T-8	---	---
California bearpoppy	ARCA4	---	---	2-8	2-8
Nevada ephedra	EPNE	T-5	T-5	---	---
creosotebush	LATR2	10-25	10-25	---	---
desertholly	ATHY	---	---	20-45	20-45
range ratany	KRPA	2-5	2-5	---	---
seepweed	SUAED	---	---	10-20	10-20
white bursage	AMDU2	25-50	25-50	---	---
wolfberry	LYCIU	---	---	5-15	5-15
Range site number		030XB005NV	030XB005NV	030XA060NV	030XA060NV
Potential production (lb/acre):					
Favorable years		500	500	100	100
Normal years		300	300	50	50
Unfavorable years		200	200	25	25

2060--PUROB-IRONGOLD ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		PUROB	IRONGOLD	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	---	2-5	---	---
big galleta	HIRI	---	5-15	5-10	---
bush muhly	MUPO2	---	---	1-5	---
desert needlegrass	STSP3	2-8	---	---	10-20
galleta	HIJA	1-3	---	---	---
Nevada ephedra	EPNE	2-5	---	1-5	---
baccharis	BACCH	---	---	5-15	---
blackbrush	CORA	60-75	60-70	---	40-50
bursage	FRANS*	---	---	5-20	---
creosotebush	LATR2	---	2-5	5-20	---
ephedra	EPHED	---	---	---	2-8
erigonum	ERIOG	---	---	1-5	---
shadscale	ATCO	---	---	---	20-30
spiny menodora	MESP2	---	---	---	T-5
white burrobrush	HYSA	---	---	2-5	---
white bursage	AMDU2	---	T-8	---	5-15
Range site number		029XY077NV	030XB029NV	030XB028NV	030XA006NV
Potential production (lb/acre):					
Favorable years		700	500	500	450
Normal years		500	350	350	350
Unfavorable years		300	250	200	275

2061--VACE GRAVELLY SANDY LOAM, 4 TO 30 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions	
		Soil name or Inclusion number--	
		VACE	Inclusion 1
big galleta	HIRI	T-8	5-10
bush muhly	MUPO2	---	1-5
Nevada ephedra	EPNE	T-5	1-5
baccharis	BACCH	---	5-15
bursage	FRANS*	---	5-20
creosotebush	LATR2	10-25	5-20
erigonum	ERIOG	---	1-5
range ratany	KRPA	2-5	---
white burrobrush	HYSA	---	2-5
white bursage	AMDU2	25-50	---

Range site number	030XB005NV	030XB028NV
Potential production (lb/acre):		
Favorable years	500	500
Normal years	300	350
Unfavorable years	200	200

2062--PUROB-NIAVI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		PUROB	NIAVI	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	1-3	T-5	---	1-5	2-10
Sandberg bluegrass	POSE	---	---	---	---	2-10
big galleta	HIRI	---	2-10	---	---	---
bush muhly	MUPO2	---	---	---	T-5	---
desert needlegrass	STSP3	2-8	2-8	5-10	2-8	---
galleta	HLVA	---	---	2-8	---	1-5
muttongrass	POFE	---	---	---	---	---
Anderson wolfberry	LYAN	---	2-5	---	---	---
Fremont dalea	PSFR	---	---	2-5	---	---
Mojave buckwheat	ERFAP	---	5-10	2-5	---	---
Mojave sage	SAMO3	---	---	5-10	---	---
Nevada ephedra	EPNE	2-5	---	---	---	---
Stansbury cliffrose	COMES	T-8	---	T-10	---	---
Utah juniper	JUOS	---	---	T-5	---	---
Virgin River encelia	ENFRV	---	2-8	2-5	---	---
Virgin River enceliaa	ENFRV	---	---	---	---	---
Wyoming big sagebrush	ARTRW	---	---	T-5	---	---
big sagebrush	ARTR2	---	---	---	---	25-35
blackbrush	CORA	60-75	---	20-40	40-60	---
creosotebush	LATR2	---	2-8	---	2-5	---
desert bitterbrush	PUGL2	2-8	---	---	---	---
desert peachbrush	PRPA	---	---	10-20	---	10-20
ephedra	EPHED	2-5	5-10	T-10	---	---
range ratany	KRPA	---	2-5	---	---	---
rubber rabbitbrush	CHNA2	---	---	---	---	5-15
rubber rabbitbrush	CHRYB9	---	---	T-5	---	---
skunkbrush sumac	RRTU	---	---	T-10	---	---
spiny menodora	MESP2	---	2-5	---	---	---
turbinella oak	QUTU2	---	---	T-10	---	---
white brittlebush	ENFA	---	T-8	---	---	---
white burrobrush	HYSA	---	2-5	---	---	---
white bursage	AMDU2	---	35-45	---	---	---
yerba-santa	ERAN2	---	---	T-5	---	---

Range site number	029XY077NV	030XB134NV	029XY143NV	030XB076NV	029XY009NV
Potential production (lb/acre):					
Favorable years	700	700	800	300	1000
Normal years	500	500	600	200	700
Unfavorable years	300	300	400	75	500

2064--LONGJIM-PUROB-NIAVI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions						
		Soil name or Inclusion number--						
		LONGJIM	PUROB	NIAVI	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	1-5	1-3	T-5	---	---	---	1-5
big galleta	HIRI	2-10	---	2-10	T-8	2-10	---	2-10
bush muhly	MUPO2	T-5	---	---	---	---	---	T-5
desert needlegrass	STSP3	2-8	2-8	2-8	---	2-10	5-10	2-8
muttongrass	POFE	---	---	---	---	---	2-8	---
Anderson wolfberry	LYAN	---	---	2-5	---	---	---	---
Fremont dalea	PSFR	---	---	---	---	---	2-5	---
Mojave buckwheat	ERFAP	---	---	5-10	---	---	2-5	---
Mojave sage	SAMO3	---	---	---	---	---	5-10	---
Nevada ephedra	EPNE	---	2-5	---	T-5	---	---	---
Shockley goldenhead	ACSH	---	---	---	---	2-5	---	---
Stansbury cliffrose	COMES	---	T-8	---	---	---	T-10	---
Utah juniper	JUOS	---	---	---	---	---	T-5	---
Virgin River encelia	ENFRV	---	---	2-8	---	---	2-5	---
Wyoming big sagebrush	ARTRW	---	---	---	---	---	T-5	---
blackbrush	CORA	40-60	60-75	---	---	40-50	20-40	40-60
creosotebush	LATR2	2-5	---	2-8	10-25	---	---	2-5
desert bitterbrush	PUGL2	---	2-8	---	---	---	---	---
desert peachbrush	PRFA	---	---	---	---	---	10-20	---
desert senna	CAAR10	---	---	---	---	2-8	---	---
ephedra	EPHE	---	2-5	5-10	---	---	T-10	---
fourwing saltbush	ATCA2	---	---	---	---	2-8	---	---
range ratany	KRPA	---	---	2-5	2-5	---	---	---
rubber rabbitbrush	CHRY89	---	---	---	---	---	T-5	---
skunkbrush sumac	RHTU	---	---	---	---	---	T-10	---
spiny hopsage	GRSP	---	---	---	---	2-5	---	---
spiny menodora	MESP2	---	---	2-5	---	2-5	---	---
turbinella oak	QUTU2	---	---	---	---	---	T-10	---
white brittlebush	ENFA	---	---	T-8	---	---	---	---
white burrobrush	HYSA	---	---	2-5	---	---	---	---
white bursage	AMDU2	---	---	35-45	25-50	---	---	---
winterfat	EULA5	---	---	---	---	2-8	---	---
yerba-santa	ERAN2	---	---	---	---	---	T-5	---

Range site number	030XB076NV	029XY077NV	030XB134NV	030XB005NV	030XB108NV	029XY143NV	030XB076NV
Potential production (lb/acre):							
Favorable years	300	700	700	500	800	800	300
Normal years	200	500	500	300	600	600	200
Unfavorable years	75	300	300	200	400	400	75

2070--SHAMOCK GRAVELLY FINE SANDY LOAM, 2 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		SHAMOCK	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	T-5	T-5	1-5	T-5
desert needlegrass	STSP3	---	---	1-5	---
cattle saltbush	ATPO	---	---	5-15	---
creosotebush	LATR2	50-70	50-70	20-30	50-70
desert pepperweed	LEFR2	2-10	2-10	---	2-10
ephedra	EPHE	---	---	2-10	---
white burrobrush	HYSA	---	---	10-20	---
white bursage	AMDU2	2-8	2-8	2-8	2-8
Range site number		030XA073NV	030XA073NV	030XA065NV	030XA073NV
Potential production (lb/acre):					
Favorable years		200	200	350	200
Normal years		100	100	150	100
Unfavorable years		50	50	75	50

2071--SHAMOCK-SKELON ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		SHAMOCK	SKELON	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-5	T-5	T-5	T-5
creosotebush	LATR2	50-70	50-70	50-70	50-70
desert pepperweed	LEFR2	2-10	2-10	2-10	2-10
white bursage	AMDU2	2-8	2-8	2-8	2-8
Range site number		030XA073NV	030XA073NV	030XA073NV	030XA073NV
Potential production (lb/acre):					
Favorable years		200	200	200	200
Normal years		100	100	100	100
Unfavorable years		50	50	50	50

2080--ST. THOMAS-ROCK OUTCROP-COMMSKI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		ST. THOMAS	ROCK OUTCROP	COMMSKI	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	---	---	2-5	1-5	2-5
desert needlegrass	STSP3	---	---	2-5	1-5	2-5
cattle saltbush	ATPO	---	---	---	5-15	---
creosotebush	LATR2	5-15	---	25-35	20-30	25-35
ephedra	EPHED	---	---	---	2-10	---
shadscale	ATCO	40-60	---	40-50	---	40-50
white burrobrush	HYSB	---	---	---	10-20	---
white bursage	AMDU2	2-10	---	---	2-8	---
Range site number		030XA056NV	none	030XA053NV	030XA065NV	030XA053NV
Potential production (lb/acre):						
Favorable years		150		200	350	200
Normal years		100		100	150	100
Unfavorable years		25		50	75	50

2081--ST. THOMAS-TECOPA-ROCK OUTCROP COMPLEX, 15 TO 75 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		ST. THOMAS	TECOPA	ROCK OUTCROP	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	---	2-10	---	1-5	10-15
Sandberg bluegrass	POSE	---	---	---	---	2-5
desert needlegrass	STSP3	---	2-8	---	1-5	2-8
galleta	HIJA	---	---	---	---	2-8
needleandthread	STCO4	---	---	---	---	15-25
Nevada ephedra	EPNE	---	1-5	---	2-5	---
Wyoming big sagebrush	ARTRW	---	---	---	---	30-35
blackbrush	CORA	---	---	---	60-80	---
creosotebush	LATR2	5-15	25-45	---	---	---
ephedra	EPHED	---	---	---	---	2-8
fourwing saltbush	ATCA2	---	---	---	---	2-5
shadscale	ATCO	40-60	---	---	---	---
white bursage	AMDU2	2-10	15-25	---	---	---
winterfat	EULA5	---	---	---	1-5	---
Range site number		030XA056NV	030XA054NV	none	030XA095NV	029XY010NV
Potential production (lb/acre):						
Favorable years		150	250		300	500
Normal years		100	150		175	350
Unfavorable years		25	50		75	250

2090--BREKO-VEET ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		BREKO	VEET	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	20-35	10-25	2-10	15-25	10-25	10-20
Sandberg bluegrass	POSE	---	---	2-10	---	---	---
bottlebrush squirreltail	SIHY	---	---	---	2-5	---	---
desert needlegrass	STSP3	2-8	10-20	---	---	10-20	---
galleta	HIJA	---	2-8	1-5	2-10	2-8	2-8
needleandthread	STCO4	5-15	2-8	---	---	2-8	5-15
globemallow	SPHAE	---	1-4	---	---	1-4	---
Bailey greasewood	SAVEB	---	---	---	0-10	---	---
Nevada ephedra	EPNE	2-5	2-5	---	1-5	2-5	2-8
Wyoming big sagebrush	ARTRW	25-35	25-30	---	---	25-30	---
big sagebrush	ARTR2	---	---	25-35	---	---	---
black sagebrush	ARARN	---	---	---	---	---	35-45
bud sagebrush	ARSP5	---	2-5	---	5-15	2-5	---
desert peachbrush	PRFA	---	---	10-20	---	---	---
fourwing saltbush	ATCA2	2-5	2-5	---	---	2-5	---
rubber rabbitbrush	CHNA2	---	---	5-15	---	---	---
shadscale	ATCO	---	---	---	25-35	---	1-5
spiny hopsage	GRSP	---	5-10	---	---	5-10	---
winterfat	EULA5	---	2-8	---	5-10	2-8	---
Range site number		029XY006NV	029XY049NV	029XY009NV	029XY017NV	029XY049NV	029XY014NV
Potential production (lb/acre):							
Favorable years		800	1100	1000	500	1100	350
Normal years		600	800	700	350	800	200
Unfavorable years		300	500	500	150	500	75

2110--PAHRUMP FINE SANDY LOAM, 4 TO 15 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions	
		Soil name or Inclusion number--	
		PAHRUMP	Inclusion 1
Indian ricegrass	ORHY	2-5	---
big galleta	HIRI	5-10	T-8
Nevada ephedra	EPNE	---	T-5
bladdersage	SAME	2-5	---
creosotebush	LATR2	---	10-25
ephedra	EPHE2	2-5	---
mesquite	PROSO	5-15	---
range ratany	KRPA	---	2-5
shadscale	ATCO	10-25	---
white bursage	AMDU2	10-20	25-50
Range site number		030XY049NV	030XB005NV
Potential production (lb/acre):			
Favorable years		250	500
Normal years		100	300
Unfavorable years		50	200

2121--COMMSKI-ARIZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		COMMSKI	ARIZO	Inclusion 1
Indian ricegrass	ORHY	T-5	1-5	T-5
desert needlegrass	STSP3	T-8	1-5	T-8
Nevada dalea	PSPO	---	2-5	---
bladdersage	SAME	---	5-10	---
cattle saltbush	ATPO	---	5-10	---
creosotebush	LATR2	10-25	15-25	10-25
white burrobrush	HYSA	---	5-10	---
white bursage	AMDU2	30-45	5-10	30-45
wolfberry	LYCIU	---	2-5	---
Range site number		030XA058NV	030XA076NV	030XA058NV
Potential production (lb/acre):				
Favorable years		350	600	350
Normal years		200	400	200
Unfavorable years		100	200	100

2131--UPSPRING-SHORIM-ROCK OUTCROP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		UPSPRING	SHORIM	ROCK OUTCROP	Inclusion 1
Indian ricegrass	ORHY	2-5	2-5	---	2-5
desert needlegrass	STSP3	2-5	2-10	---	2-10
Anderson wolfberry	LYAN	5-10	5-10	---	5-10
Nevada ephedra	EPNE	2-5	2-10	---	2-10
Shockley goldenhead	ACSH	---	1-5	---	1-5
bud sagebrush	ARSP5	---	2-10	---	2-10
creosotebush	LATR2	10-20	5-15	---	5-15
shadscale	ATCO	10-25	15-25	---	15-25
spiny menodora	MESP2	5-15	1-5	---	1-5
white bursage	AMDU2	5-10	---	---	---

Range site number	030XA068NV	030XA061NV	none	030XA061NV
Potential production (lb/acre):				
Favorable years	250	300		300
Normal years	150	150		150
Unfavorable years	50	50		50

2140--JONNIC-NIAVI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		JONNIC	NIAVI	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	2-8	T-5	T-5	---	2-5	---
big galleta	HIRI	---	2-10	---	5-10	---	T-8
bush muhly	MUPO2	---	---	---	1-5	---	---
desert needlegrass	STSP3	2-8	2-8	T-5	---	5-10	---
Anderson wolfberry	LYAN	---	2-5	---	---	---	---
Mojave buckwheat	ERFAP	2-5	5-10	---	---	---	---
Nevada ephedra	EPNE	---	---	T-5	1-5	---	T-5
Virgin River encelia	ENFRV	---	2-8	---	---	---	---
baccharis	BACCH	---	---	---	5-15	---	---
blackbrush	CORA	30-45	---	---	---	---	---
bursage	FRANS*	---	---	---	5-20	---	---
creosotebush	LATR2	---	2-8	5-10	5-20	2-8	10-25
ephedra	EPHED	2-5	5-10	---	---	---	---
erigonum	ERIOG	---	---	---	1-5	---	---
range ratany	KRPA	2-5	2-5	2-5	---	2-5	2-5
spiny menodora	MESP2	2-5	2-5	---	---	---	---
white brittlebush	ENFA	---	T-8	---	---	---	---
white burrobrush	HYSA	---	2-5	---	2-5	---	---
white bursage	AMDU2	15-30	35-45	25-50	---	20-30	25-50
winterfat	EULA5	---	---	---	---	5-15	---

Range site number	030XA093NV	030XB134NV	030XA071NV	030XB028NV	030XA007NV	030XB005NV
Potential production (lb/acre):						
Favorable years	450	700	500	500	500	500
Normal years	300	500	300	350	350	300
Unfavorable years	150	300	200	200	200	200

2151--ARIZO-BLUEPOINT-DUNE LAND COMPLEX, 0 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		ARIZO	BLUEPOINT	DUNE LAND	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	5-10	---	2-5	T-5
desert needlegrass	STSP3	1-5	5-10	---	2-5	---
sand dropseed	SPCR	---	5-10	---	---	---
Nevada dalea	PSPO	2-5	---	---	---	---
bladdersage	SAME	5-10	---	---	---	---
cattle saltbush	ATPO	5-10	---	---	---	---
creosotebush	LATR2	15-25	10-20	---	25-35	50-70
desert pepperweed	LEFR2	---	---	---	---	2-10
fourwing saltbush	ATCA2	---	10-15	---	---	---
shadscale	ATCO	---	---	---	40-50	---
white burrobrush	HYSB	5-10	---	---	---	---
white bursage	AMDU2	5-10	5-10	---	---	2-8
winterfat	EULA5	---	10-15	---	---	---
wolfberry	LYCIU	2-5	---	---	---	---
Range site number		030XA076NV	030XA069NV	none	030XA053NV	030XA073NV
Potential production (lb/acre):						
Favorable years		600	400		200	200
Normal years		400	250		100	100
Unfavorable years		200	100		50	50

2152--ARIZO VERY GRAVELLY SANDY LOAM, MOIST, 0 TO 2 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		ARIZO	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	1-5	2-5	5-10	1-5
desert needlegrass	STSP3	1-5	---	5-10	1-5
sand dropseed	SPCR	---	---	5-10	---
Nevada dalea	PSPO	2-5	---	---	2-5
bladdersage	SAME	5-10	---	---	5-10
cattle saltbush	ATPO	5-10	25-45	---	5-10
creosotebush	LATR2	15-25	5-15	10-20	15-25
fourwing saltbush	ATCA2	---	---	10-15	---
white burrobrush	HYSB	5-10	---	---	5-10
white bursage	AMDU2	5-10	10-20	5-10	5-10
winterfat	EULA5	---	---	10-15	---
wolfberry	LYCIU	2-5	---	---	2-5
Range site number		030XA076NV	030XY046NV	030XA069NV	030XA076NV
Potential production (lb/acre):					
Favorable years		600	450	400	600
Normal years		400	300	250	400
Unfavorable years		200	150	100	200

2153--ARIZO-CORBILT-COMMSKI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions						
		Soil name or Inclusion number--						
		ARIZO	CORBILT	COMMSKI	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	1-5	2-8	T-5	5-10	2-8	2-8	---
desert needlegrass	STSP3	1-5	5-10	T-8	5-10	5-10	---	1-5
sand dropseed	SPCR	---	---	---	5-10	---	---	---
Cooper wolfberry	LYCO2	---	---	---	---	---	2-5	---
Nevada dalea	PSPO	2-5	---	---	---	---	---	---
bladdersage	SAME	5-10	---	---	---	---	---	---
cattle saltbush	ATPO	5-10	---	---	---	---	---	---
creosotebush	LATR2	15-25	---	10-25	10-20	---	10-20	25-45
fourwing saltbush	ATCA2	---	---	---	10-15	---	---	---
shadscale	ATCO	---	30-50	---	---	30-50	15-25	---
white burrobrush	HYSA	5-10	2-5	---	---	2-5	---	5-10
white bursage	AMDU2	5-10	---	30-45	5-10	---	30-40	10-25
winterfat	EULA5	---	---	---	10-15	---	---	---
wolfberry	LYCIU	2-5	2-5	---	---	2-5	---	---
Range site number		030XA076NV	030XA050NV	030XA058NV	030XA069NV	030XA050NV	030XA066NV	030XA067NV
Potential production (lb/acre):								
Favorable years		600	200	350	400	200	350	125
Normal years		400	100	200	250	100	200	75
Unfavorable years		200	50	100	100	50	100	25

2161--CASAGA-NOWOY COMPLEX, 2 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		CASAGA	NOWOY	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	---	2-8	1-5	2-15	2-5
alkali sacaton	SPAI	1-5	---	---	---	---
desert needlegrass	STSP3	---	---	---	---	2-5
inland saltgrass	DISPS2	1-5	---	---	---	---
California bearpoppy	ARCA4	---	---	2-8	---	---
catclaw	ACGR	---	---	---	1-10	---
cattle saltbush	ATPO	---	15-25	---	---	---
creosotebush	LATR2	1-5	---	---	---	25-35
desertholly	ATHY	5-20	---	20-45	---	---
fourwing saltbush	ATCA2	---	5-10	---	25-40	---
mesquite	PROSO	---	---	---	25-45	---
seepweed	SUAED	---	---	10-20	---	---
shadscale	ATCO	25-35	20-40	---	---	40-50
white bursage	AMDU2	---	5-15	---	---	---
wolfberry	LYCIU	---	---	5-15	---	---
Range site number		030XY025NV	030XA057NV	030XA060NV	030XY045NV	030XA053NV
Potential production (lb/acre):						
Favorable years		300	400	100	1500	200
Normal years		100	300	50	900	100
Unfavorable years		50	150	25	500	50

2162--CASAGA-PANOR-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		CASAGA	PANOR	YERMO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	2-5	2-5	2-15	5-15
big galleta	HIRI	---	---	---	---	30-50
desert needlegrass	STSP3	---	2-5	2-5	---	---
dropseed	SPOR0	---	---	---	---	5-10
California bearpoppy	ARCA4	2-8	---	---	---	---
Nevada ephedra	EPNE	---	---	---	1-10	1-5
catclaw	ACGR	---	---	---	---	---
cattle saltbush	ATPO	---	---	---	---	2-5
creosotebush	LATR2	---	25-35	25-35	---	---
desertholly	ATHY	20-45	---	---	---	---
fourwing saltbush	ATCA2	---	---	---	25-40	10-20
mesquite	PROSO	---	---	---	25-45	---
seepweed	SUAED	10-20	---	---	---	---
shadscale	ATCO	---	40-50	40-50	---	---
wolfberry	LYCIU	5-15	---	---	---	---
Range site number		030XA060NV	030XA053NV	030XA053NV	030XY045NV	030XB032NV
Potential production (lb/acre):						
Favorable years		100	200	200	1500	1000
Normal years		50	100	100	900	700
Unfavorable years		25	50	50	500	450

2171--SANWELL-SKELON COMPLEX, 2 TO 8 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		SANWELL	SKELON	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-5	T-5	T-5	T-5
desert needlegrass	STSP3	T-8	---	T-8	T-8
creosotebush	LATR2	10-25	50-70	10-25	10-25
desert pepperweed	LEFR2	---	2-10	---	---
white bursage	AMDU2	30-45	2-8	30-45	30-45
Range site number		030XA058NV	030XA073NV	030XA058NV	030XA058NV
Potential production (lb/acre):					
Favorable years		350	200	350	350
Normal years		200	100	200	200
Unfavorable years		100	50	100	100

2172--SANWELL-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		SANWELL	YERMO	Inclusion 1
Indian ricegrass	ORHY	2-5	T-5	2-5
desert needlegrass	STSP3	2-5	---	2-5
creosotebush	LATR2	25-35	50-70	25-35
desert pepperweed	LEFR2	---	2-10	---
shadscale	ATCO	40-50	---	40-50
white bursage	AMDU2	---	2-8	---
Range site number				
		030XA053NV	030XA073NV	030XA053NV
Potential production (lb/acre):				
Favorable years		200	200	200
Normal years		100	100	100
Unfavorable years		50	50	50

2181--SKELON-YERMO-PINEZ COMPLEX, 0 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		SKELON	YERMO	PINEZ	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-5	2-5	2-5	2-5	1-5	T-15
desert needlegrass	STSP3	2-5	2-5	2-5	2-5	1-5	2-8
Nevada ephedra	EPNE	---	---	---	---	---	2-8
bud sagebrush	ARSP5	---	---	---	---	---	5-10
cattle saltbush	ATPO	---	---	---	---	5-15	---
creosotebush	LATR2	25-35	25-35	25-35	25-35	20-30	---
ephedra	EPHED	---	---	---	---	2-10	---
shadscale	ATCO	40-50	40-50	40-50	40-50	---	30-40
spiny menodora	MESP2	---	---	---	---	---	5-15
white burrobrush	HYSA	---	---	---	---	10-20	---
white bursage	AMDU2	---	---	---	---	2-8	5-15
Range site number							
		030XA053NV	030XA053NV	030XA053NV	030XA053NV	030XA065NV	030XA051NV
Potential production (lb/acre):							
Favorable years		200	200	200	200	350	400
Normal years		100	100	100	100	150	300
Unfavorable years		50	50	50	50	75	100

2184--SKELON-BULLFOR ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		SKELON	BULLFOR	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-15	T-15	T-15	T-15
desert needlegrass	STSP3	2-8	2-8	2-8	2-8
Nevada ephedra	EPNE	2-8	2-8	2-8	2-8
bud sagebrush	ARSP5	5-10	5-10	5-10	5-10
shadscale	ATCO	30-40	30-40	30-40	30-40
spiny menodora	MESP2	5-15	5-15	5-15	5-15
white bursage	AMDU2	5-15	5-15	5-15	5-15
Range site number		030XA051NV	030XA051NV	030XA051NV	030XA051NV
Potential production (lb/acre):					
Favorable years		400	400	400	400
Normal years		300	300	300	300
Unfavorable years		100	100	100	100

2185--SKELON-YERMO-ASHMED COMPLEX, 4 TO 15 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		SKELON	YERMO	ASHMED	Inclusion 1
Indian ricegrass	ORHY	T-5	T-5	1-5	2-8
big galleta	HIRI	---	---	---	2-5
desert needlegrass	STSP3	---	---	---	2-5
California bearpoppy	ARCA4	---	---	2-8	---
Nevada ephedra	EPNE	---	---	---	2-5
bud sagebrush	ARSP5	---	---	---	2-5
creosotebush	LATR2	50-70	50-70	---	2-5
desert pepperweed	LEPR2	2-10	2-10	---	---
desertholly	ATHY	---	---	20-45	---
seepweed	SUAED	---	---	10-20	---
shadscale	ATCO	---	---	---	15-30
spiny menodora	MESP2	---	---	---	10-20
white bursage	AMDU2	2-8	2-8	---	5-10
wolfberry	LYCIU	---	---	5-15	2-5
Range site number		030XA073NV	030XA073NV	030XA060NV	030XB031NV
Potential production (lb/acre):					
Favorable years		200	200	100	500
Normal years		100	100	50	300
Unfavorable years		50	50	25	150

2186--YERMO-SKELON-PINEZ COMPLEX, 4 TO 15 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		YERMO	SKELON	PINEZ	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	T-5	2-5	2-8	2-5	---	T-15
big galleta	HIRI	---	---	---	---	50-60	---
bush muhly	MUPO2	---	---	---	---	10-20	---
desert needlegrass	STSP3	T-8	2-10	---	2-5	2-5	2-8
Anderson wolfberry	LYAN	---	5-10	---	---	---	---
Cooper wolfberry	LYCO2	---	---	2-5	---	---	---
Nevada ephedra	EPNE	---	2-10	---	---	---	2-8
Shockley goldenhead	ACSH	---	1-5	---	---	---	---
bud sagebrush	ARSP5	---	2-10	---	---	---	5-10
creosotebush	LATR2	10-25	5-15	10-20	25-35	5-15	---
ephedra	EPHED	---	---	---	---	1-5	---
range ratany	KRFA	---	---	---	---	2-5	---
shadscale	ATCO	---	15-25	15-25	40-50	---	30-40
spiny menodora	MESP2	---	1-5	---	---	---	5-15
white bursage	AMDU2	30-45	---	30-40	---	10-20	5-15
Range site number		030XA058NV	030XA061NV	030XA066NV	030XA053NV	030XB007NV	030XA051NV
Potential production (lb/acre):							
Favorable years		350	300	350	200	500	400
Normal years		200	150	200	100	350	300
Unfavorable years		100	50	100	50	200	100

2191--PINEZ-LEALANDIC-ARIZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		PINEZ	LEALANDIC	ARIZO	Inclusion 1
Indian ricegrass	ORHY	2-5	2-5	1-5	T-5
desert needlegrass	STSP3	2-5	2-5	1-5	---
cattle saltbush	ATPO	---	---	5-15	---
creosotebush	LATR2	25-35	25-35	20-30	50-70
desert pepperweed	LEFR2	---	---	---	2-10
ephedra	EPHED	---	---	2-10	---
shadscale	ATCO	40-50	40-50	---	---
white burrobrush	HYSA	---	---	10-20	---
white bursage	AMDU2	---	---	2-8	2-8
Range site number		030XA053NV	030XA053NV	030XA065NV	030XA073NV
Potential production (lb/acre):					
Favorable years		200	200	350	200
Normal years		100	100	150	100
Unfavorable years		50	50	75	50

2201--CORBILT-ARIZO COMPLEX, 2 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		CORBILT	ARIZO	Inclusion 1
Indian ricegrass	ORHY	2-8	1-5	2-8
desert needlegrass	STSP3	5-10	1-5	---
Cooper wolfberry	LYCO2	---	---	2-5
cattle saltbush	ATPO	---	5-15	---
creosotebush	LATR2	---	20-30	10-20
ephedra	EPHED	---	2-10	---
shadscale	ATCO	30-50	---	15-25
white burrobrush	HYSB	2-5	10-20	---
white bursage	AMDU2	---	2-8	30-40
wolfberry	LYCIU	2-5	---	---
Range site number		030XA050NV	030XA065NV	030XA066NV
Potential production (lb/acre):				
Favorable years		200	350	350
Normal years		100	150	200
Unfavorable years		50	75	100

2202--CORBILT-MIGERN-ARIZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		CORBILT	MIGERN	ARIZO	Inclusion 1
Indian ricegrass	ORHY	T-15	T-15	1-5	T-15
desert needlegrass	STSP3	2-8	2-8	1-5	2-8
Nevada ephedra	EPNE	2-8	2-8	---	2-8
bud sagebrush	ARSP5	5-10	5-10	---	5-10
cattle saltbush	ATPO	---	---	5-15	---
creosotebush	LATR2	---	---	20-30	---
ephedra	EPHED	---	---	2-10	---
shadscale	ATCO	30-40	30-40	---	30-40
spiny menodora	MESP2	5-15	5-15	---	5-15
white burrobrush	HYSB	---	---	10-20	---
white bursage	AMDU2	5-15	5-15	2-8	5-15
Range site number		030XA051NV	030XA051NV	030XA065NV	030XA051NV
Potential production (lb/acre):					
Favorable years		400	400	350	400
Normal years		300	300	150	300
Unfavorable years		100	100	75	100

2204--CORBILT-WODAVAR-SANWELL ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		CORBILT	WODAVAR	SANWELL	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-5	1-5	2-5	5-15	2-5
Cattle saltbush	ATPO	---	---	---	60-70	---
big galleta	HIRI	---	---	---	T-8	---
bush muhly	MUPO2	---	---	---	T-5	---
desert needlegrass	STSP3	2-5	---	2-5	2-10	2-5
fluffgrass	ERFUS	---	---	---	T-5	---
Mojave buckwheat	ERFAP	---	---	---	20-40	---
Nevada ephedra	EPNE	---	---	---	2-5	---
creosotebush	LATR2	25-35	30-50	25-35	2-10	25-35
range ratany	KRPA	---	---	---	2-5	---
shadscale	ATCO	40-50	10-30	40-50	---	40-50
triangle goldeneye	VIDE2	---	---	---	T-10	---
white bursage	AMDU2	---	---	---	15-35	---
Range site number		030XA053NV	030XA047NV	030XA053NV	030XY047NV	030XA053NV
Potential production (lb/acre):						
Favorable years		200	75	200	500	200
Normal years		100	50	100	400	100
Unfavorable years		50	25	50	250	50

2212--YERMO-BULLFOR ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		YERMO	BULLFOR	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	T-15	T-15	T-15	T-15	1-5
desert needlegrass	STSP3	2-8	2-8	2-8	2-8	2-8
Anderson wolfberry	LYAN	---	---	---	---	5-10
Nevada ephedra	EPNE	2-8	2-8	2-8	2-8	---
bud sagebrush	ARSP5	5-10	5-10	5-10	5-10	---
ephedra	EPHE	---	---	---	---	5-10
shadscale	ATCO	30-40	30-40	30-40	30-40	20-45
spiny menodora	MESP2	5-15	5-15	5-15	5-15	2-10
white bursage	AMDU2	5-15	5-15	5-15	5-15	2-5
Range site number		030XA051NV	030XA051NV	030XA051NV	030XA051NV	030XA044NV
Potential production (lb/acre):						
Favorable years		400	400	400	400	250
Normal years		300	300	300	300	150
Unfavorable years		100	100	100	100	50

2214--YERMO-ARIZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		YERMO	ARIZO	Inclusion 1
Indian ricegrass	ORHY	2-5	1-5	T-5
desert needlegrass	STSP3	2-10	1-5	T-8
Anderson wolfberry	LYAN	5-10	---	---
Nevada dalea	PSPO	---	2-5	---
Nevada ephedra	EPNE	2-10	---	---
Shockley goldenhead	ACSH	1-5	---	---
bladdersage	SAME	---	5-10	---
bud sagebrush	ARSP5	2-10	---	---
cattle saltbush	ATPO	---	5-10	---
creosotebush	LATR2	5-15	15-25	10-25
shadscale	ATCO	15-25	---	---
spiny menodora	MESP2	1-5	---	---
white burrobrush	HYSA	---	5-10	---
white bursage	AMDU2	---	5-10	30-45
wolfberry	LYCIU	---	2-5	---
Range site number		030XA061NV	030XA076NV	030XA058NV
Potential production (lb/acre):				
Favorable years		300	600	350
Normal years		150	400	200
Unfavorable years		50	200	100

2215--YERMO-GREYEAGLE ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		YERMO	GREYEAGLE	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	T-15	2-8	T-15	1-5	2-8
desert needlegrass	STSP3	2-8	5-10	2-8	1-5	5-10
Nevada ephedra	EPNE	2-8	---	2-8	---	---
bud sagebrush	ARSP5	5-10	---	5-10	---	---
cattle saltbush	ATPO	---	---	---	5-15	---
creosotebush	LATR2	---	---	---	20-30	---
ephedra	EPHED	---	---	---	2-10	---
shadscale	ATCO	30-40	30-50	30-40	---	30-50
spiny menodora	MESP2	5-15	---	5-15	---	---
white burrobrush	HYSB	---	2-5	---	10-20	2-5
white bursage	AMDU2	5-15	---	5-15	2-8	---
wolfberry	LYCTU	---	2-5	---	---	2-5
Range site number		030XA051NV	030XA050NV	030XA051NV	030XA065NV	030XA050NV
Potential production (lb/acre):						
Favorable years		400	200	400	350	200
Normal years		300	100	300	150	100
Unfavorable years		100	50	100	75	50

2216--YERMO-ARIZO COMPLEX, 2 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		YERMO	ARIZO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-15	1-5	2-5	2-15
desert needlegrass	STSP3	2-8	1-5	2-10	---
Anderson wolfberry	LYAN	---	---	5-10	---
Nevada ephedra	EPNE	2-8	---	2-10	---
Shockley goldenhead	ACSH	---	---	1-5	---
bud sagebrush	ARSP5	5-10	---	2-10	---
catclaw	ACGR	---	---	---	1-10
cattle saltbush	ATPO	---	5-15	---	---
creosotebush	LATR2	---	20-30	5-15	---
ephedra	EPHED	---	2-10	---	---
fourwing saltbush	ATCA2	---	---	---	25-40
mesquite	PROSO	---	---	---	25-45
shadscale	ATCO	30-40	---	15-25	---
spiny menodora	MESP2	5-15	---	1-5	---
white burrobrush	HYSB	---	10-20	---	---
white bursage	AMDU2	5-15	2-8	---	---
Range site number		030XA051NV	030XA065NV	030XA061NV	030XY045NV
Potential production (lb/acre):					
Favorable years		400	350	300	1500
Normal years		300	150	150	900
Unfavorable years		100	75	50	500

2218--SANWELL-COMMSKI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		SANWELL	COMMSKI	Inclusion 1
Indian ricegrass	ORHY	2-5	1-5	2-8
big galleta	HIRI	---	---	2-5
desert needlegrass	STSP3	2-5	---	2-5
California bearpoppy	ARCA4	---	2-8	---
Nevada ephedra	EPNE	---	---	2-5
bud sagebrush	ARSP5	---	---	2-5
creosotebush	LATR2	25-35	---	2-5
desertholly	ATHY	---	20-45	---
seepweed	SUAED	---	10-20	---
shadscale	ATCO	40-50	---	15-30
spiny menodora	MESP2	---	---	10-20
white bursage	AMDU2	---	---	5-10
wolfberry	LYCIU	---	5-15	2-5

Range site number	030XA053NV	030XA060NV	030XB031NV
Potential production (lb/acre):			
Favorable years	200	100	500
Normal years	100	50	300
Unfavorable years	50	25	150

2220--CANOTO-ARIZO COMPLEX, 2 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		CANOTO	ARIZO	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	---	---	T-5	---	T-5	2-8
big galleta	HIRI	T-8	5-10	2-10	T-8	---	---
bush muhly	MUPO2	---	1-5	---	---	---	---
desert needlegrass	STSP3	---	---	2-8	---	T-5	2-8
Anderson wolfberry	LYAN	---	---	2-5	---	---	2-5
Mojave buckwheat	ERFAP	---	---	5-10	---	---	---
Nevada ephedra	EPNE	T-5	1-5	---	T-5	T-5	---
Virgin River encelia	ENFRV	---	---	2-8	---	---	---
baccharis	BACCH	---	5-15	---	---	---	---
blackbrush	CORA	---	---	---	---	---	30-45
bursage	FRANS*	---	5-20	---	---	---	---
creosotebush	LATR2	10-25	5-20	2-8	10-25	5-10	---
ephedra	EPHED	---	---	5-10	---	---	2-5
erigonum	ERIOG	---	1-5	---	---	---	---
range ratany	KRPA	2-5	---	2-5	2-5	2-5	2-5
spiny menodora	MESP2	---	---	2-5	---	---	2-5
white brittlebush	ENFA	---	---	T-8	---	---	---
white burrobrush	HYSA	---	2-5	2-5	---	---	---
white bursage	AMDU2	25-50	---	35-45	25-50	25-50	15-30

Range site number	030XB005NV	030XB028NV	030XB134NV	030XB005NV	030XA071NV	030XA093NV
Potential production (lb/acre):						
Favorable years	500	500	700	500	500	450
Normal years	300	350	500	300	300	300
Unfavorable years	200	200	300	200	200	150

2221--SANWELL-GREYEAGLE ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		SANWELL	GREYEAGLE	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-5	2-8	2-8	2-10
bottlebrush squirreltail	SIHY	---	---	---	2-5
desert needlegrass	STSP3	2-10	5-10	5-10	---
Anderson wolfberry	LYAN	5-10	---	---	---
Nevada ephedra	EPNE	2-10	---	---	---
Shockley goldenhead	ACSH	1-5	---	---	---
black greasewood	SAVE4	---	---	---	20-35
bud sagebrush	ARSP5	2-10	---	---	5-15
creosotebush	LATR2	5-15	---	---	---
fourwing saltbush	ATCA2	---	---	---	2-5
shadscale	ATCO	15-25	30-50	30-50	30-50
spiny manodora	MESP2	1-5	---	---	---
white burrobrush	HYSA	---	2-5	2-5	---
wolfberry	LYCIU	---	2-5	2-5	---
Range site number		030XA061NV	030XA050NV	030XA050NV	029XY024NV
Potential production (lb/acre):					
Favorable years		300	200	200	700
Normal years		150	100	100	500
Unfavorable years		50	50	50	300

2222--NIAVI-JONNIC ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		NIAVI	JONNIC	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	T-5	2-8	---	---	---
big galleta	HIRI	2-10	---	5-10	T-8	---
bush muhly	MUPC2	---	---	1-5	---	---
desert needlegrass	STSP3	2-8	2-8	---	---	---
Anderson wolfberry	LYAN	2-5	---	---	---	---
Mojave buckwheat	ERFAP	5-10	2-5	---	---	---
Nevada ephedra	EPNE	---	---	1-5	T-5	---
Virgin River encelia	ENFRV	2-8	---	---	---	---
baccharis	BACCH	---	---	5-15	---	---
blackbrush	CORA	---	30-45	---	---	---
bursage	FRANS*	---	---	5-20	---	---
creosotebush	LATR2	2-8	---	5-20	10-25	---
ephedra	EPHED	5-10	2-5	---	---	---
erigonum	ERIOG	---	---	1-5	---	---
range ratany	KRPA	2-5	2-5	---	2-5	---
spiny manodora	MESP2	2-5	2-5	---	---	---
white brittlebush	ENFA	T-8	---	---	---	---
white burrobrush	HYSA	2-5	---	2-5	---	---
white bursage	AMDU2	35-45	15-30	---	25-50	---
Range site number		030XB134NV	030XA093NV	030XB028NV	030XB005NV	none
Potential production (lb/acre):						
Favorable years		700	450	500	500	
Normal years		500	300	350	300	
Unfavorable years		300	150	200	200	

2230--YERMO-SKELON ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		YERMO	SKELON	Inclusion 1	Inclusion 2
Indian ricegrass	ORRY	2-5	2-5	1-5	T-15
desert needlegrass	STSP3	2-10	2-10	1-5	2-8
Anderson wolfberry	LYAN	5-10	5-10	---	---
Nevada dalea	PSPO	---	---	2-5	---
Nevada ephedra	EPNE	2-10	2-10	---	2-8
Shockley goldenhead	ACSH	1-5	1-5	---	---
bladdersage	SAME	---	---	5-10	---
bud sagebrush	ARSP5	2-10	2-10	---	5-10
cattle saltbush	ATPO	---	---	5-10	---
creosotebush	LATR2	5-15	5-15	15-25	---
shadscale	ATCO	15-25	15-25	---	30-40
spiny menodora	MESP2	1-5	1-5	---	5-15
white burrobrush	HYSA	---	---	5-10	---
white bursage	AMDU2	---	---	5-10	5-15
wolfberry	LYCIU	---	---	2-5	---

Range site number	030XA061NV	030XA061NV	030XA076NV	030XA051NV
Potential production (lb/acre):				
Favorable years	300	300	600	400
Normal years	150	150	400	300
Unfavorable years	50	50	200	100

2233--YERMO-SKELON-BLUEPOINT ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		YERMO	SKELON	BLUEPOINT	Inclusion 1	Inclusion 2
Indian ricegrass	ORRY	2-5	2-5	5-10	1-5	2-5
desert needlegrass	STSP3	2-10	2-10	5-10	1-5	2-10
sand dropseed	SPCR	---	---	5-10	---	---
Anderson wolfberry	LYAN	5-10	5-10	---	---	5-10
Nevada dalea	PSPO	---	---	---	2-5	---
Nevada ephedra	EPNE	2-10	2-10	---	---	2-10
Shockley goldenhead	ACSH	1-5	1-5	---	---	1-5
bladdersage	SAME	---	---	---	5-10	---
bud sagebrush	ARSP5	2-10	2-10	---	---	2-10
cattle saltbush	ATPO	---	---	---	5-10	---
creosotebush	LATR2	5-15	5-15	10-20	15-25	5-15
fourwing saltbush	ATCA2	---	---	10-15	---	---
shadscale	ATCO	15-25	15-25	---	---	15-25
spiny menodora	MESP2	1-5	1-5	---	---	1-5
white burrobrush	HYSA	---	---	---	5-10	---
white bursage	AMDU2	---	---	5-10	5-10	---
winterfat	EULA5	---	---	10-15	---	---
wolfberry	LYCIU	---	---	---	2-5	---

Range site number	030XA061NV	030XA061NV	030XA069NV	030XA076NV	030XA061NV
Potential production (lb/acre):					
Favorable years	300	300	400	600	300
Normal years	180	180	250	400	180
Unfavorable years	80	80	100	200	80

2250--TOKOPER-UPSPRING-ROCK OUTCROP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		TOKOPER	UPSPRING	ROCK OUTCROP	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	5-10	2-5	---	5-10	2-5
bottlebrush squirreltail	SIHY	2-5	---	---	2-5	---
desert needlegrass	STSP3	2-8	2-5	---	2-8	2-5
galleta	HIJA	5-15	---	---	5-15	---
Anderson wolfberry	LYAN	---	5-10	---	---	5-10
Bailey greasewood	SAVEB	5-15	---	---	5-15	---
Nevada ephedra	EPNE	2-5	2-5	---	2-5	2-5
bud sagebrush	ARSP5	5-10	---	---	5-10	---
creosotebush	LATR2	---	10-20	---	---	10-20
shadscale	ATCO	25-35	10-25	---	25-35	10-25
spiny menodora	MESP2	---	5-15	---	---	5-15
white bursage	AMDU2	---	5-10	---	---	5-10
winterfat	EULA5	5-10	---	---	5-10	---
Range site number		029XY022NV	030XA068NV	none	029XY022NV	030XA068NV
Potential production (lb/acre):						
Favorable years		400	250		400	250
Normal years		250	150		250	150
Unfavorable years		100	50		100	50

2251--TOKOPER-DOWNEYVILLE-PINTWATER ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		TOKOPER	DOWNEYVILLE	PINTWATER	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	5-10	5-10	5-10	---	5-10
bottlebrush squirreltail	SIHY	2-5	2-5	2-5	---	---
desert needlegrass	STSP3	2-8	2-8	2-8	---	---
galleta	HIJA	5-15	5-15	5-15	---	---
Bailey greasewood	SAVEB	5-15	5-15	5-15	---	2-10
Cooper wolfberry	LYCO2	---	---	---	---	2-5
Nevada ephedra	EPNE	2-5	2-5	2-5	---	2-5
bud sagebrush	ARSP5	5-10	5-10	5-10	---	---
burrobrush	HYMEN3	---	---	---	---	5-10
fourwing saltbush	ATCA2	---	---	---	---	5-15
littleleaf horsebrush	TEGL	---	---	---	---	5-10
rubber rabbitbrush	CHNA2	---	---	---	---	10-25
shadscale	ATCO	25-35	25-35	25-35	---	---
winterfat	EULA5	5-10	5-10	5-10	---	---
Range site number		029XY022NV	029XY022NV	029XY022NV	none	029XY041NV
Potential production (lb/acre):						
Favorable years		400	400	400		500
Normal years		250	250	250		300
Unfavorable years		100	100	100		100

2252--TOKOPER-BLACKTOP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		TOKOPER	BLACKTOP	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	5-10	2-5	5-10	---
bottlebrush squirreltail	SIHY	2-5	---	2-5	---
desert needlegrass	STSP3	2-8	---	2-8	---
galleta	HIJA	5-15	---	5-15	---
Bailey greasewood	SAVEB	5-15	5-15	5-15	---
Cooper wolfberry	LYCO2	---	1-5	---	---
Nevada dalea	PSPO	---	1-5	---	---
Nevada ephedra	EPNE	2-5	---	2-5	---
bud sagebrush	ARSP5	5-10	---	5-10	---
shadscale	ATCO	25-35	50-70	25-35	---
winterfat	EULAS	5-10	---	5-10	---

Range site number	029XY022NV	029XY033NV	029XY022NV	none
Potential production (lb/acre):				
Favorable years	400	100	400	
Normal years	250	50	250	
Unfavorable years	100	25	100	

2253--TOKOPER-ARDIVEY ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		TOKOPER	ARDIVEY	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	5-10	10-15	15-25	5-10	---
bottlebrush squirreltail	SIHY	2-5	---	2-5	---	---
desert needlegrass	STSP3	2-8	---	---	---	---
galleta	HIJA	5-15	2-8	2-10	---	---
Bailey greasewood	SAVEB	5-15	5-15	0-10	2-10	---
Cooper wolfberry	LYCO2	---	---	---	2-5	---
Nevada ephedra	EPNE	2-5	2-8	1-5	2-5	---
bud sagebrush	ARSP5	5-10	2-5	5-15	---	---
burrobrush	HYMEN3	---	---	---	5-10	---
fourwing saltbush	ATCA2	---	---	---	5-15	---
littleleaf horsebrush	TEGL	---	---	---	5-10	---
rubber rabbitbrush	CHNA2	---	---	---	10-25	---
shadscale	ATCO	25-35	5-15	25-35	---	---
spiny menodora	MESP2	---	35-45	---	---	---
winterfat	EULAS	5-10	---	5-10	---	---

Range site number	029XY022NV	029XY036NV	029XY017NV	029XY041NV	none
Potential production (lb/acre):					
Favorable years	400	400	500	500	
Normal years	250	300	350	300	
Unfavorable years	100	100	150	100	

2254--TOKOPER-DOWNEYVILLE-ESPINT ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		TOKOPER	DOWNEYVILLE	ESPINT	Inclusion 1
Indian ricegrass	ORHY	5-10	5-10	10-15	10-20
Sandberg bluegrass	POSE	---	---	2-5	---
bottlebrush squirreltail	SIHY	2-5	2-5	---	---
desert needlegrass	STSP3	2-8	2-8	2-8	---
galleta	HIJA	5-15	5-15	2-8	2-8
needleandthread	STCO4	---	---	15-25	5-15
Bailey greasewood	SAVEB	5-15	5-15	---	---
Nevada ephedra	EPNE	2-5	2-5	---	2-8
Wyoming big sagebrush	ARTRW	---	---	30-35	---
black sagebrush	ARARN	---	---	---	35-45
bud sagebrush	ARSP5	5-10	5-10	---	---
ephedra	EPHED	---	---	2-8	---
fourwing saltbush	ATCA2	---	---	2-5	---
shadscale	ATCO	25-35	25-35	---	1-5
winterfat	EULA5	5-10	5-10	---	---

Range site number	029XY022NV	029XY022NV	029XY010NV	029XY014NV
Potential production (lb/acre):				
Favorable years	400	400	500	350
Normal years	250	250	350	200
Unfavorable years	100	100	250	75

2260--GREYEAGLE VERY GRAVELLY SANDY LOAM, 2 TO 8 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		GREYEAGLE	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-8	2-5	T-5	T-5
desert needlegrass	STSP3	---	2-5	T-8	T-8
Cooper wolfberry	LYCO2	2-5	---	---	---
Nevada ephedra	EPNE	---	2-5	---	---
blackbrush	CORA	---	50-70	---	---
creosotebush	LATR2	10-20	---	10-25	10-25
desert pepperweed	LEFR2	---	1-5	---	---
shadscale	ATCO	15-25	---	---	---
spiny manodora	MESP2	---	1-5	---	---
white bursage	AMDU2	30-40	---	30-45	30-45

Range site number	030XA066NV	030XA094NV	030XA058NV	030XA058NV
Potential production (lb/acre):				
Favorable years	350	450	350	350
Normal years	200	300	200	200
Unfavorable years	100	150	100	100

2261--LONGJIM-YERMO-DEDAS ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		LONGJIM	YERMO	DEDAS	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-5	T-5	2-5	1-5	1-5
desert needlegrass	STSP3	2-5	T-8	2-5	1-5	1-5
Nevada dalea	PSPO	---	---	---	2-5	---
Nevada ephedra	EPNE	2-5	---	2-5	---	2-5
blackbrush	CORA	50-70	---	50-70	---	60-80
bladdersage	SAME	---	---	---	5-10	---
cattle saltbush	ATPO	---	---	---	5-10	---
creosotebush	LATR2	---	10-25	---	15-25	---
desert pepperweed	LEFR2	1-5	---	1-5	---	---
spiny menodora	MESP2	1-5	---	1-5	---	---
white burrobrush	HYSB	---	---	---	5-10	---
white bursage	AMDU2	---	30-45	---	5-10	---
winterfat	EULA5	---	---	---	---	1-5
wolfberry	LYCIU	---	---	---	2-5	---
Range site number		030XA094NV	030XA058NV	030XA094NV	030XA076NV	030XA095NV
Potential production (lb/acre):						
Favorable years		450	350	450	600	300
Normal years		300	200	300	400	175
Unfavorable years		150	100	150	200	75

2263--GREYEAGLE-SANWELL-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		GREYEAGLE	SANWELL	YERMO	Inclusion 1
Indian ricegrass	ORHY	2-8	T-5	T-5	1-5
desert needlegrass	STSP3	---	T-8	T-8	1-5
Cooper wolfberry	LYCO2	2-5	---	---	---
cattle saltbush	ATPO	---	---	---	5-15
creosotebush	LATR2	10-20	10-25	10-25	20-30
ephedra	EPHE	---	---	---	2-10
shadscale	ATCO	15-25	---	---	---
white burrobrush	HYSB	---	---	---	10-20
white bursage	AMDU2	30-40	30-45	30-45	2-8
Range site number		030XA066NV	030XA058NV	030XA058NV	030XA065NV
Potential production (lb/acre):					
Favorable years		350	350	350	350
Normal years		200	200	200	150
Unfavorable years		100	100	100	75

2266--GREYEAGLE VERY GRAVELLY SANDY LOAM, 15 TO 50 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions	
		Soil name or Inclusion number--	
		GREYEAGLE	Inclusion 1
Indian ricegrass	ORHY	2-8	---
big galleta	HIRI	---	30-50
bush muhly	MUPO2	---	T-5
desert globemallow	SPAM2	---	2-5
Cooper wolfberry	LYCO2	2-5	---
creosotebush	LATR2	10-20	---
ephedra	EPHED	---	2-5
shadscale	ATCO	15-25	---
white bursage	AMDU2	30-40	20-40

Range site number	030XA066NV	030XB066NV
Potential production (lb/acre):		
Favorable years	350	800
Normal years	200	600
Unfavorable years	100	450

2267--GREYEAGLE-SKELON ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		GREYEAGLE	SKELON	Inclusion 1
Indian ricegrass	ORHY	T-15	T-15	2-5
desert needlegrass	STSP3	2-8	2-8	2-10
Anderson wolfberry	LYAN	---	---	5-10
Nevada ephedra	EPNE	2-8	2-8	2-10
Shockley goldenhead	ACSH	---	---	1-5
bud sagebrush	ARSP5	5-10	5-10	2-10
creosotebush	LATR2	---	---	5-15
shadscale	ATCO	30-40	30-40	15-25
spiny menodora	MESP2	5-15	5-15	1-5
white bursage	AMDU2	5-15	5-15	---

Range site number	030XA051NV	030XA051NV	030XA061NV
Potential production (lb/acre):			
Favorable years	400	400	300
Normal years	300	300	150
Unfavorable years	100	100	50

2268--GREYEAGLE-ARIZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		GREYEAGLE	ARIZO	Inclusion 1
Indian ricegrass	ORHY	2-8	1-5	1-5
desert needlegrass	STSP3	---	1-5	1-5
Cooper wolfberry	LYCO2	2-5	---	---
Nevada dalea	PSPO	---	2-5	---
bladdersage	SAME	---	5-10	---
cattle saltbush	ATPO	---	5-10	5-15
creosotebush	LATR2	10-20	15-25	20-30
ephedra	EPHED	---	---	2-10
shadscale	ATCO	15-25	---	---
white burrobrush	HYSA	---	5-10	10-20
white bursage	AMDU2	30-40	5-10	2-8
wolfberry	LYCIU	---	2-5	---
Range site number		030XA066NV	030XA076NV	030XA065NV
Potential production (lb/acre):				
Favorable years		350	600	350
Normal years		200	400	150
Unfavorable years		100	200	75

2269--GREYEAGLE-YERMO-STROZI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		GREYEAGLE	YERMO	STROZI	Inclusion 1
Indian ricegrass	ORHY	T-15	2-5	T-15	T-15
desert needlegrass	STSP3	2-8	2-10	2-8	2-8
Anderson wolfberry	LYAN	---	5-10	---	---
Nevada ephedra	EPNE	2-8	2-10	2-8	2-8
Shockley goldenhead	ACSH	---	1-5	---	---
bud sagebrush	ARSP5	5-10	2-10	5-10	5-10
creosotebush	LATR2	---	5-15	---	---
shadscale	ATCO	30-40	15-25	30-40	30-40
spiny menodora	MESP2	5-15	1-5	5-15	5-15
white bursage	AMDU2	5-15	---	5-15	5-15
Range site number		030XA051NV	030XA061NV	030XA051NV	030XA051NV
Potential production (lb/acre):					
Favorable years		400	300	400	400
Normal years		300	150	300	300
Unfavorable years		100	50	100	100

2270--BLUEPOINT LOAMY FINE SAND, WARM, 4 TO 30 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		BLUEPOINT	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	5-10	1-5	
desert needlegrass	STSP3	5-10	1-5	T-5
sand dropseed	SPCR	5-10	---	---
cattle saltbush	ATPO	---	5-15	---
creosotebush	LATR2	10-20	20-30	50-70
desert pepperweed	LEFR2	---	---	2-10
ephedra	EPHED	---	2-10	---
fourwing saltbush	ATCA2	10-15	---	---
white burrobrush	HYSB	---	10-20	---
white bursage	AMDU2	5-10	2-8	2-8
winterfat	EULA5	10-15	---	---

Range site number	030XA069NV	030XA065NV	030XA073NV
Potential production (lb/acre):			
Favorable years	400	350	200
Normal years	250	150	100
Unfavorable	100	75	50

2271--KAWICH-CORBILT-WANOMIE COMPLEX, 0 TO 2 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		KAWICH	CORBILT	WANOMIE	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	20-30	2-8	2-8	2-10	---
bottlebrush squirreltail	SIHY	---	---	---	2-5	---
desert needlegrass	STSP3	---	5-10	5-10	---	---
inland saltgrass	DISPS2	2-5	---	---	---	---
black greasewood	SAVE4	30-50	---	---	20-35	---
bud sagebrush	ARSP5	---	---	---	5-15	---
fourwing saltbush	ATCA2	2-5	---	---	2-5	---
shadscale	ATCO	2-5	30-50	30-50	30-50	---
white burrobrush	HYSB	---	2-5	2-5	---	---
wolfberry	LYCIU	---	2-5	2-5	---	---

Range site number	027XY016NV	030XA050NV	030XA050NV	029XY024NV	none
Potential production (lb/acre):					
Favorable years	500	200	200	700	
Normal years	300	100	100	500	
Unfavorable years	150	50	50	300	

2280--SHORIM-ZALDA-UPSPRING ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		SHORIM	ZALDA	UPSPRING	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	---	2-5	---	---
desert needlegrass	STSP3	---	---	2-5	---	---
California bearpoppy	ARCA4	2-8	---	---	---	---
Anderson wolfberry	LYAN	---	---	5-10	---	---
Nevada ephedra	EPNE	---	---	2-5	---	---
creosotebush	LATR2	---	5-15	10-20	---	---
desertholly	ATHY	20-45	---	---	---	---
seepweed	SUAED	10-20	---	---	---	---
shadscale	ATCO	---	40-60	10-25	---	---
spiny menodora	MESP2	---	---	5-15	---	---
white bursage	AMDU2	---	2-10	5-10	---	---
wolfberry	LYCIU	5-15	---	---	---	---
Range site number		030XA060NV	030XA056NV	030XA068NV	none	none
Potential production (lb/acre):						
Favorable years		100	150	250		
Normal years		50	100	150		
Unfavorable years		25	25	50		

2281--SHORIM-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		SHORIM	YERMO	Inclusion 1
Indian ricegrass	ORHY	1-5	T-5	2-8
desert needlegrass	STSP3	---	T-8	5-10
California bearpoppy	ARCA4	2-8	---	---
Nevada ephedra	EPNE	---	---	2-8
creosotebush	LATR2	---	10-25	10-20
desertholly	ATHY	20-45	---	---
seepweed	SUAED	10-20	---	---
shadscale	ATCO	---	---	20-35
white bursage	AMDU2	---	30-45	10-15
wolfberry	LYCIU	5-15	---	---
Range site number		030XA060NV	030XA058NV	030XA059NV
Potential production (lb/acre):				
Favorable years		100	350	250
Normal years		50	200	150
Unfavorable years		25	100	50

2282--DEDAS-ORWASH ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		DEDAS	ORWASH	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-5	T-15	2-10	2-10
desert needlegrass	STSP3	2-5	2-8	2-10	2-10
galleta	HIJA	---	---	1-5	1-5
Nevada ephedra	EPNE	2-5	2-8	2-8	2-8
blackbrush	CORA	50-70	---	50-60	50-60
bud sagebrush	ARSP5	---	5-10	---	---
desert pepperweed	LEFR2	1-5	---	---	---
shadscale	ATCO	---	30-40	---	---
spiny menodora	MESP2	1-5	5-15	---	---
white bursage	AMDU2	---	5-15	---	---

Range site number	030XA094NV	030XA051NV	029XY019NV	029XY019NV
Potential production (lb/acre):				
Favorable years	450	400	500	500
Normal years	300	300	350	350
Unfavorable years	150	100	200	200

2290--GABBEVALLY-UPSPRING-RUBBLE LAND ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		GABBEVALLY	UPSPRING	RUBBLE LAND	Inclusion 1
Indian ricegrass	ORHY	10-15	2-5	---	15-25
Sandberg bluegrass	POSE	2-5	---	---	2-5
desert needlegrass	STSP3	2-8	2-5	---	2-8
galleta	HIJA	2-8	---	---	T-5
needleandthread	STCO4	15-25	---	---	10-15
Anderson wolfberry	LYAN	---	5-10	---	---
Nevada ephedra	EPNE	---	2-5	---	2-5
Wyoming big sagebrush	ARTRW	30-35	---	---	30-35
creosotebush	LATR2	---	10-20	---	---
ephedra	EPHED	2-8	---	---	2-8
fourwing saltbush	ATCA2	2-5	---	---	2-5
shadscale	ATCO	---	10-25	---	---
spiny menodora	MESP2	---	5-15	---	---
white bursage	AMDU2	---	5-10	---	---

Range site number	029XY010NV	030XA068NV	none	029XY010NV
Potential production (lb/acre):				
Favorable years	500	250		500
Normal years	350	150		350
Unfavorable years	250	50		200

2291--GABEVALLY-ROCK OUTCROP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		GABEVALLY	ROCK OUTCROP	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	10-15	---	2-10	10-15
Sandberg bluegrass	POSE	2-5	---	---	2-5
Thurber needlegrass	STTH2	---	---	2-8	---
desert needlegrass	STSP3	2-8	---	2-10	2-8
galleta	HIJA	2-8	---	1-5	2-8
muttongrass	POSE	---	---	2-8	---
needleandthread	STCO4	15-25	---	20-30	15-25
Stansbury cliffrose	COMES	---	---	2-8	---
Wyoming big sagebrush	ARTRW	30-35	---	---	30-35
antelope bitterbrush	PUTR2	---	---	2-8	---
big sagebrush	ARTR2	---	---	15-25	---
ephedra	EPHED	2-8	---	---	2-8
fourwing saltbush	ATCA2	2-5	---	2-5	2-5
green ephedra	EPVI	---	---	2-5	---
blackbrush	CORA	---	---	50-60	---
Nevada ephedra	EPNE	---	---	2-8	---
Range site number		029XY010NV	none	029XY019NV	029XY010NV
Potential production (lb/acre):					
Favorable years		500		500	500
Normal years		350		350	350
Unfavorable years		250		200	250

2301--TECOPA-HALEBURU-ROCK OUTCROP COMPLEX, 2 TO 50 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		TECOPA	HALEBURU	ROCK OUTCROP	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	5-10	---	---	---	---
big galleta	HIRI	2-8	T-5	---	---	---
desert needlegrass	STSP3	2-8	---	---	---	1-5
fluffgrass	ERPUS	---	2-5	---	---	---
creosotebush	LATR2	2-5	5-20	---	---	25-45
desert pepperweed	LEPR2	---	T-5	---	---	---
ephedra	EPHED	2-10	T-10	---	---	---
range ratany	KRPA	---	2-5	---	---	---
shadscale	ATCO	30-50	---	---	---	---
white burrobrush	HUSA	---	---	---	---	5-10
white hursage	AMDU2	2-5	50-60	---	---	10-25
Range site number		030XB002NV	030XB001NV	none	none	030XA067NV
Potential production (lb/acre):						
Favorable years		250	350			125
Normal years		150	250			75
Unfavorable years		50	100			25

2302--TECOPA-ROCK OUTCROP-UPSPRING COMPLEX, 4 TO 50 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		TECOPA	ROCK OUTCROP	UPSPRING	Inclusion 1
Indian ricegrass	ORHY	2-8	---	2-5	10-15
Sandberg bluegrass	POSE	---	---	---	2-5
desert needlegrass	STSP3	5-10	---	2-5	2-8
galleta	HIJA	---	---	---	2-8
needleandthread	STCO4	---	---	---	15-25
Anderson wolfberry	LYAN	---	---	5-10	---
Nevada ephedra	EPNE	2-8	---	2-5	---
Wyoming big sagebrush	ARTRW	---	---	---	30-35
creosotebush	LATR2	10-20	---	10-20	---
ephedra	EPHED	---	---	---	2-8
fourwing saltbush	ATCA2	---	---	---	2-5
shadscale	ATCO	20-35	---	10-25	---
spiny menodora	MESP2	---	---	5-15	---
white bursage	AMDU2	10-15	---	5-10	---
Range site number		030XA059NV	none	030XA068NV	029XY010NV
Potential production (lb/acre):					
Favorable years		250		250	500
Normal years		150		150	350
Unfavorable years		50		50	250

2304--TECOPA-ZIBATE-ROCK OUTCROP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		TECOPA	ZIBATE	ROCK OUTCROP	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	---	1-5	---	---	T-5
big galleta	HIRI	T-5	2-10	---	25-40	2-10
bush muhly	MUPO2	---	T-5	---	2-5	---
desert needlegrass	STSP3	---	2-8	---	---	2-8
fluffgrass	ERPU8	2-5	---	---	---	---
globemallow	SPHAE	---	---	---	2-5	---
Anderson wolfberry	LYAN	---	---	---	---	2-5
Mojave buckwheat	ERFAP	---	---	---	---	5-10
Virgin River encelia	ENFRV	---	---	---	---	2-8
blackbrush	CORA	---	40-60	---	---	---
creosotebush	LATR2	5-20	2-5	---	10-30	2-8
desert pepperweed	LEFR2	T-5	---	---	---	---
ephedra	EPHED	T-10	---	---	---	5-10
range ratany	KRPA	2-5	---	---	2-5	2-5
spiny menodora	MESP2	---	---	---	---	2-5
white brittlebush	ENFA	---	---	---	---	T-8
white burrobrush	HYSA	---	---	---	---	2-5
white bursage	AMDU2	50-60	---	---	25-40	35-45
Range site number		030XB001NV	030XB076NV	none	030XB100NV	030XB134NV
Potential production (lb/acre):						
Favorable years		350	300		1000	700
Normal years		250	200		700	500
Unfavorable years		100	75		450	300

2305--TECOPA-ROCK OUTCROP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		TECOPA	ROCK OUTCROP	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	---	---	---	---	1-5
big galleta	HIRI	T-5	---	---	T-8	2-10
bush muhly	MUPO2	---	---	---	T-5	T-5
desert needlegrass	STSP3	---	---	---	2-10	2-8
fluffgrass	ERPU8	2-5	---	2-5	T-5	---
Mojave buckwheat	ERFAP	---	---	---	20-40	---
Nevada ephedra	EPNE	---	---	---	2-5	---
blackbrush	CORA	---	---	---	---	40-60
creosotebush	LATR2	5-20	---	75-90	2-10	2-5
desert pepperweed	LEFR2	T-5	---	---	---	---
ephedra	EPHE2	T-10	---	---	---	---
range ratany	KRPA	2-5	---	---	2-5	---
triangle goldeneye	VIDE2	---	---	---	T-10	---
white bursage	AMDU2	50-60	---	2-15	15-35	---
Range site number		030XB001NV	none	030XB017NV	030XB070NV	030XB076NV
Potential production (lb/acre):						
Favorable years		350		125	500	300
Normal years		250		75	350	200
Unfavorable years		100		25	200	75

2310--NOWOY-COMMSKI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		NOWOY	COMMSKI	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	T-5	T-5	1-5
California bearpoppy	ARCA4	2-8	---	---	---
creosotebush	LATR2	---	50-70	50-70	30-50
desert pepperweed	LEFR2	---	2-10	2-10	---
desertholly	ATHY	20-45	---	---	---
seepweed	SUAED	10-20	---	---	---
shadscale	ATCO	---	---	---	10-30
white bursage	AMDU2	---	2-8	2-8	---
wolfberry	LYCIU	5-15	---	---	---
Range site number		030XA060NV	030XA073NV	030XA073NV	030XA047NV
Potential production (lb/acre):					
Favorable years		100	200	200	75
Normal years		50	100	100	50
Unfavorable years		25	50	50	25

2312--COMMSKI-TANAZZA ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		COMMSKI	TANAZZA	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	T-5	1-5	1-5	1-5	2-8
big galleta	HIRI	---	2-5	2-5	2-5	5-10
black grama	BOER4	---	---	---	---	10-20
desert needlegrass	STSP3	T-8	---	---	---	2-8
galleta	HIJA	---	---	---	---	T-5
Nevada ephedra	EPNE	---	---	---	---	2-5
blackbrush	CORA	---	---	---	---	40-60
creosotebush	LATR2	10-25	20-40	20-40	20-40	---
rabbitbrush	CHRY89	---	2-5	2-5	2-5	---
white burrobrush	HYSA	---	3-5	3-5	3-5	---
white bursage	AMDU2	30-45	5-15	5-15	5-15	---

Range site number	030XA058NV	030XB038NV	030XB038NV	030XB038NV	030XB014NV
Potential production (lb/acre):					
Favorable years	350	250	250	250	700
Normal years	200	150	150	150	500
Unfavorable years	100	50	50	50	250

2320--WAHGUYHE-ROCK OUTCROP-GABBEVALLY ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		WAHGUYHE	ROCK OUTCROP	GABBEVALLY	Inclusion 1
Indian ricegrass	ORHY	10-15	---	10-15	5-10
Sandberg bluegrass	POSE	2-5	---	2-5	---
bottlebrush squirreltail	SIHY	---	---	---	2-5
desert needlegrass	STSP3	2-8	---	2-8	2-8
galleta	HIJA	2-8	---	2-8	5-15
needleandthread	STCO4	15-25	---	15-25	---
Bailey greasewood	SAVEB	---	---	---	5-15
Nevada ephedra	EPNE	---	---	---	2-5
Wyoming big sagebrush	ANTRW	30-35	---	30-35	---
bud sagebrush	ARSP5	---	---	---	5-10
ephedra	EPHED	2-8	---	2-8	---
fourwing saltbush	ATCA2	2-5	---	2-5	---
shadscale	ATCO	---	---	---	25-35
winterfat	EULA5	---	---	---	5-10

Range site number	029XY010NV	none	029XY010NV	029XY022NV
Potential production (lb/acre):				
Favorable years	500		500	400
Normal years	350		350	250
Unfavorable years	250		250	100

2341--NAYE GRAVELLY FINE SANDY LOAM, 4 TO 8 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		NAYE	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	---	---	---	2-8
alkali sacaton	SPAI	---	20-40	---	---
big galleta	HIRI	T-8	---	5-10	5-10
black grama	BOER4	---	---	---	10-20
desert needlegrass	STSP3	---	---	---	2-8
galleta	HIJA	---	---	---	T-5
Anderson wolfberry	LYAN	---	---	---	---
Nevada ephedra	EPNE	T-5	---	---	2-5
blackbrush	CORA	---	---	---	40-60
creosotebush	LATR2	10-25	---	5-20	---
bursage	AMBR0	---	---	5-20	---
fourwing saltbush	ATCA2	---	30-50	---	---
mesquite	PROSO	---	2-8	---	---
range ratany	KRPA	2-5	---	---	---
shadscale	ATCO	---	2-15	20-45	---
spiny manodora	MESP2	---	---	2-10	---
white bursage	AMDU2	25-50	---	2-5	---
baccharis	BACCH	---	---	5-15	---
white burrowbrush	HYSA	---	---	2-5	---
Range site number		030XB005NV	030XY009NV	030XB028NV	030XB014NV
Potential production (lb/acre):					
Favorable years		500	900	500	700
Normal years		300	700	350	500
Unfavorable years		200	500	200	250

2372--ZALDA-BLUEPOINT-ROCK OUTCROP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		ZALDA	BLUEPOINT	ROCK OUTCROP	Inclusion 1
Indian ricegrass	ORHY	1-5	20-30	---	T-15
desert needlegrass	STSP3	2-8	---	---	2-8
sand dropseed	SPCR	---	2-10	---	---
Anderson wolfberry	LYAN	5-10	---	---	---
Nevada dalea	PSPO	---	2-5	---	---
Nevada ephedra	EPNE	---	2-10	---	2-8
bud sagebrush	ARSP5	---	---	---	5-10
ephedra	EPHED	5-10	---	---	---
fourwing saltbush	ATCA2	---	20-40	---	---
shadscale	ATCO	20-45	---	---	30-40
spiny manodora	MESP2	2-10	---	---	5-15
white bursage	AMDU2	2-5	---	---	5-15
winterfat	EULA5	---	10-20	---	---
Range site number		030XA044NV	030XA063NV	none	030XA051NV
Potential production (lb/acre):					
Favorable years		250	700		400
Normal years		150	500		300
Unfavorable years		50	300		100

2373--ZALDA-RUBBLE LAND-SKELON COMPLEX, 8 TO 30 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		ZALDA	RUBBLE LAND	SKELON	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	---	T-15	2-5	1-5
desert needlegrass	STSP3	2-8	---	2-8	2-5	---
California bearpoppy	ARCA4	---	---	---	---	2-8
Anderson wolfberry	LYAN	5-10	---	---	---	---
Nevada ephedra	EPNE	---	---	2-8	---	---
bud sagebrush	ARSP5	---	---	5-10	---	---
desertholly	ATHY	---	---	---	---	20-45
ephedra	EPHED	5-10	---	---	---	---
seepweed	SUAED	---	---	---	---	10-20
shadscale	ATCO	20-45	---	30-40	40-50	---
spiny menodora	MESP2	2-10	---	5-15	---	---
white bursage	AMDU2	2-5	---	5-15	---	---
wolfberry	LYCIU	---	---	---	---	5-15
creosotebush	LATR2	---	---	---	25-35	---
Range site number		030XA044NV	none	030XA051NV	030XA053NV	030XA060NV
Potential production (lb/acre):						
Favorable years		250		400	200	100
Normal years		150		300	100	50
Unfavorable years		50		100	50	25

2381--ARMPUP-ASHMED ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		ARMPUP	ASHMED	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	1-5	1-5	1-5
California bearpoppy	ARCA4	---	2-8	---	2-8
creosotebush	LATR2	30-50	---	30-50	---
desertholly	ATHY	---	20-45	---	20-45
seepweed	SUAED	---	10-20	---	10-20
shadscale	ATCO	10-30	---	10-30	---
wolfberry	LYCIU	---	5-15	---	5-15
Range site number		030XA047NV	030XA060NV	030XA047NV	030XA060NV
Potential production (lb/acre):					
Favorable years		75	100	75	100
Normal years		50	50	50	50
Unfavorable years		25	25	25	25

2391--COMMSKI-ASHMED COMPLEX, 4 TO 50 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		COMMSKI	ASHMED	Inclusion 1
Indian ricegrass	ORHY	1-5	1-5	1-5
California bearpoppy	ARCA4	2-8	2-8	2-8
desertholly	ATHY	20-45	20-45	20-45
seepweed	SUAED	10-20	10-20	10-20
wolfberry	LYCIU	5-15	5-15	5-15
Range site number		030XA060NV	030XA060NV	030XA060NV
Potential production (lb/acre):				
Favorable years		100	100	100
Normal years		50	50	50
Unfavorable years		25	25	25

2392--COMMSKI-ASHMED ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		COMMSKI	ASHMED	Inclusion 1
Indian ricegrass	ORHY	2-8	2-8	---
big galleta	HIRI	---	---	T-8
Cooper wolfberry	LYCO2	2-5	2-5	---
Nevada ephedra	EPNE	---	---	T-5
creosotebush	LATR2	10-20	10-20	10-25
range ratany	KRPA	---	---	2-5
shadscale	ATCO	15-25	15-25	---
white bursage	AMDU2	30-40	30-40	25-50
Range site number		030XA066NV	030XA066NV	030XB005NV
Potential production (lb/acre):				
Favorable years		350	350	500
Normal years		200	200	300
Unfavorable years		100	100	200

2393--COMMSKI-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		COMMSKI	YERMO	Inclusion 1
Indian ricegrass	ORHY	T-5	T-5	---
big galleta	HIRI	---	---	T-8
desert needlegrass	STSP3	T-8	T-8	---
Nevada ephedra	EPNE	---	---	T-5
creosotebush	LATR2	10-25	10-25	10-25
range ratany	KRPA	---	---	2-5
white bursage	AMDU2	30-45	30-45	25-50
Range site number		030XA058NV	030XA058NV	030XB005NV
Potential production (lb/acre):				
Favorable years		350	350	500
Normal years		200	200	300
Unfavorable years		100	100	200

2400--MOBL-SCOTTCAS ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		MOBL	SCOTTCAS	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-8	2-8	---	2-8
desert needlegrass	STSP3	5-10	5-10	---	5-10
inland saltgrass	DISP82	---	---	2-10	---
black greasewood	SAVE4	---	---	60-70	---
seepweed	SUAED	---	---	2-8	---
shadscale	ATCO	30-50	30-50	2-10	30-50
white burrobrush	HYSA	2-5	2-5	---	2-5
wolfberry	LYCIU	2-5	2-5	---	2-5
Range site number		030XA050NV	030XA050NV	027XY025NV	030XA050NV
Potential production (lb/acre):					
Favorable years		200	200	500	200
Normal years		100	100	350	100
Unfavorable years		50	50	200	50

2401--SKELON-BACHO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		SKELON	BACHO	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-5	T-15	2-8	1-5	2-5
desert needlegrass	STSP3	2-10	2-8	---	1-5	2-10
Anderson wolfberry	LYAN	5-10	---	---	---	5-10
Cooper wolfberry	LYCO2	---	---	2-5	---	---
Nevada ephedra	EPNE	2-10	2-8	---	---	2-10
Shockley goldenhead	ACSH	1-5	---	---	---	1-5
bud sagebrush	ARSP5	2-10	5-10	---	---	2-10
cattle saltbush	ATPO	---	---	---	5-15	---
creosotebush	LATR2	5-15	---	10-20	20-30	5-15
ephedra	EPHED	---	---	---	2-10	---
shadscale	ATCO	15-25	30-40	15-25	---	15-25
spiny menodora	MESP2	1-5	5-15	---	---	1-5
white burrobrush	HYSA	---	---	---	10-20	---
white bursage	AMDU2	---	5-15	30-40	2-8	---
Range site number		030XA061NV	030XA051NV	030XA066NV	030XA065NV	030XA061NV
Potential production (lb/acre):						
Favorable years		300	400	350	350	300
Normal years		150	300	200	150	150
Unfavorable years		50	100	100	75	50

2421--ORWASH-WILST-AGON COMPLEX

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		ORWASH	WILST	AGON	Inclusion 1
Indian ricegrass	ORHY	2-5	2-5	2-5	2-5
desert needlegrass	STSP3	2-10	2-10	2-10	2-5
Anderson wolfberry	LYAN	5-10	5-10	5-10	---
Nevada ephedra	EPNE	2-10	2-10	2-10	2-5
Shockley goldenhead	ACSH	1-5	1-5	1-5	---
blackbrush	CORA	---	---	---	50-70
bud sagebrush	ARSP5	2-10	2-10	2-10	---
creosotebush	LATR2	5-15	5-15	5-15	---
desert pepperweed	LEFR2	---	---	---	1-5
shadscale	ATCO	15-25	15-25	15-25	---
spiny menodora	MESP2	1-5	1-5	1-5	1-5
Range site number		030XA061NV	030XA061NV	030XA061NV	030XA094NV
Potential production (lb/acre):					
Favorable years		300	300	300	450
Normal years		150	150	150	300
Unfavorable years		50	50	50	150

2422--ORWASH-LOUDBACK-ARIZO COMPLEX, 2 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		ORWASH	LOUDBACK	ARIZO	Inclusion 1	Inclusion 2
Baltic rush	JUBA	---	---	---	---	5-15
Indian ricegrass	ORHY	T-15	2-10	1-5	2-5	---
alkali cordgrass	SPGR	---	---	---	---	2-5
alkali sacaton	SPAI	---	---	---	---	25-40
basin wildrye	ELCI2	---	---	---	---	2-5
bottlebrush squirreltail	SIHY	---	2-5	---	---	---
desert needlegrass	STSP3	2-8	---	1-5	2-10	---
giantreed	ARDO4	---	---	---	---	2-5
inland saltgrass	DISP52	---	---	---	---	10-15
Anderson wolfberry	LYAN	---	---	---	5-10	---
Nevada dalea	PSPO	---	---	2-5	---	---
Nevada ephedra	EPNE	2-8	---	---	2-10	---
Shockley goldenhead	ACSH	---	---	---	1-5	---
black greasewood	SAVE4	---	20-35	---	---	---
bladdersage	SAME	---	---	5-10	---	---
bud sagebrush	ARSP5	5-10	5-15	---	2-10	---
cattle saltbush	ATPO	---	---	5-10	---	---
creosotebush	LATR2	---	---	15-25	5-15	---
fourwing saltbush	ATCA2	---	2-5	---	---	---
shadscale	ATCO	30-40	30-50	---	15-25	---
spiny menodora	MESP2	5-15	---	---	1-5	---
white burrobrush	HYSA	---	---	5-10	---	---
white bursage	AMDU2	5-15	---	5-10	---	---
wolfberry	LYCIU	---	---	2-5	---	---
Range site number		030XA051NV	029XY024NV	030XA076NV	030XA061NV	029XY002NV
Potential production (lb/acre):						
Favorable years		400	700	600	300	3300
Normal years		300	500	400	150	2200
Unfavorable years		100	300	200	50	1000

2423--ORWASH-GREYEAGLE-WANOMIE ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		ORWASH	GREYEAGLE	WANOMIE	Inclusion 1
Indian ricegrass	ORHY	T-15	T-15	T-15	---
desert needlegrass	STSP3	2-8	2-8	2-8	---
needlegrass	STIPA	---	---	---	2-8
Nevada ephedra	EPNE	2-8	2-8	2-8	---
Utah agave	AGUT	---	---	---	2-5
bud sagebrush	ARSP5	5-10	5-10	5-10	---
shadscale	ATCO	30-40	30-40	30-40	---
spiny menodora	MESP2	5-15	5-15	5-15	---
white bursage	AMDU2	5-15	5-15	5-15	---
Range site number		030XA051NV	030XA051NV	030XA051NV	030XB068NV
Potential production (lb/acre):					
Favorable years		400	400	400	250
Normal years		300	300	300	150
Unfavorable years		100	100	100	100

2425--ORWASH-YERMO-ARIZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		ORWASH	YERMO	ARIZO	Inclusion 1
Indian ricegrass	ORHY	T-15	T-15	1-5	---
desert needlegrass	STSP3	2-8	2-8	1-5	---
inland saltgrass	DISPS2	---	---	---	2-10
Nevada dalea	PSPO	---	---	2-5	---
Nevada ephedra	EPNE	2-8	2-8	---	---
black greasewood	SAVE4	---	---	---	60-70
bladdersage	SAME	---	---	5-10	---
bud sagebrush	ARSP5	5-10	5-10	---	---
cattle saltbush	ATPO	---	---	5-10	---
creosotebush	LATR2	---	---	15-25	---
seepweed	SUAED	---	---	---	2-8
shadscale	ATCO	30-40	30-40	---	2-10
spiny menodora	MESP2	5-15	5-15	---	---
white burrobrush	HYSB	---	---	5-10	---
white bursage	AMDU2	5-15	5-15	5-10	---
wolfberry	LYCIU	---	---	2-5	---
Range site number		030XA051NV	030XA051NV	030XA076NV	027XY025NV
Potential production (lb/acre):					
Favorable years		400	400	600	500
Normal years		300	300	400	350
Unfavorable years		100	100	200	200

2431--ZIBATE-ZYPLAR-DEDAS ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		ZIBATE	ZYPLAR	DEDAS	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	1-5	2-5	1-5	10-15
Sandberg bluegrass	POSE	---	---	---	---	2-5
desert needlegrass	STSP3	1-5	1-5	2-5	1-5	2-8
galleta	HIJA	---	---	---	---	2-8
needleandthread	STCO4	---	---	---	---	15-25
Nevada ephedra	EPNE	2-5	2-5	2-5	2-5	---
Wyoming big sagebrush	ARTRW	---	---	---	---	30-35
blackbrush	CORA	60-80	60-80	50-70	60-80	---
desert pepperweed	LEFR2	---	---	1-5	---	---
ephedra	EPHED	---	---	---	---	2-8
fourwing saltbush	ATCA2	---	---	---	---	2-5
spiny menodora	MESP2	---	---	1-5	---	---
winterfat	EULA5	1-5	1-5	---	1-5	---
Range site number		030XA095NV	030XA095NV	030XA094NV	030XA095NV	029XY010NV
Potential production (lb/acre):						
Favorable years		300	300	450	300	500
Normal years		175	175	300	175	350
Unfavorable years		75	75	150	75	250

2432--ZIBATE VERY GRAVELLY SANDY LOAM, 8 TO 15 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		ZIBATE	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	1-5	---
desert needlegrass	STSP3	1-5	1-5	---
Nevada ephedra	EPNE	2-5	2-5	---
blackbrush	CORA	60-80	60-80	---
winterfat	EULA5	1-5	1-5	---
Range site number		030XA095NV	030XA095NV	none
Potential production (lb/acre):				
Favorable years		300	300	
Normal years		175	175	
Unfavorable years		75	75	

2434--CRUZSPRING-SCHADER-ROCK OUTCROP ASSOCIATION

(An X indicates that the named plant is in the potential native woodland understory and the percentage is highly variable.
Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		CRUZSPRING	SCHADER	ROCK OUTCROP	Inclusion 1	Inclusion 2	Inclusion 3
Canby bluegrass	POCA	---	---	---	---	X	---
Indian ricegrass	ORHY	1-3	10-15	---	1-5	---	2-10
Sandberg bluegrass	POSE	---	2-5	---	---	X	2-10
big galleta	HIRI	---	---	---	2-10	---	---
bush muhly	MUPO2	---	---	---	T-5	---	---
desert needlegrass	STSP3	2-8	2-8	---	2-8	---	---
galleta	HIJA	---	2-8	---	---	---	1-5
muttongrass	POFE	---	---	---	---	X	---
needleandthread	STCO4	---	15-25	---	---	---	---
prairie junegrass	KOPY	---	---	---	---	X	---
erigonum	ERIOG	---	---	---	---	X	---
Nevada ephedra	EPNE	2-5	---	---	---	---	---
Stansbury cliffrose	COMES	T-8	---	---	---	---	---
Wyoming big sagebrush	ARTRW	---	30-35	---	---	X	---
big sagebrush	ARTR2	---	---	---	---	---	25-35
blackbrush	CORA	60-75	---	---	40-60	---	---
creosotebush	LATR2	---	---	---	2-5	---	---
desert bitterbrush	PUGL2	2-8	---	---	---	X	---
desert peachbrush	PRFA	---	---	---	---	---	10-20
ephedra	EPHED	2-5	2-8	---	---	---	---
fourwing saltbush	ATCA2	---	2-5	---	---	---	---
mountain big sagebrush	ARVA2	---	---	---	---	X	---
rubber rabbitbrush	CHNA2	---	---	---	---	---	5-15
singleleaf pinyon	PIMO	---	---	---	---	X	---
Range site number		029XY077NV	029XY010NV	none	030XB076NV	029XY065NV	029XY009NV
Potential production (lb/acre):							
Favorable years		700	500		300	500	1000
Normal years		500	350		200	300	700
Unfavorable years		300	250		75	200	500

2436--ZIBATE-ROCK OUTCROP COMPLEX, 15 TO 50 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or inclusion number--				
		ZIBATE	ROCK OUTCROP	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	1-5	---	1-3	T-5	10-20
Thurber needlegrass	STTH2	---	---	---	---	2-8
big galleta	HIRI	2-10	---	---	2-10	---
bush muhly	MUPO2	T-5	---	---	---	---
desert needlegrass	STSP3	2-8	---	2-8	2-8	---
muttongrass	POFE	---	---	---	---	2-8
needleandthread	STCO4	---	---	---	---	20-30
Anderson wolfberry	LYAN	---	---	---	2-5	---
Mojave buckwheat	ERFAP	---	---	---	5-10	---
Nevada ephedra	EPNE	---	---	2-5	---	---
Stansbury cliffrose	COMES	---	---	T-8	---	2-8
Virgin River encelia	ENFRV	---	---	---	2-8	---
antelope bitterbrush	PUTR2	---	---	---	---	2-8
big sagebrush	ARTR2	---	---	---	---	15-25
blackbrush	CORA	40-60	---	60-75	---	---
creosotebush	LATR2	2-5	---	---	2-8	---
desert bitterbrush	PUGL2	---	---	2-8	---	---
ephedra	EPHED	---	---	2-5	5-10	---
fourwing saltbush	ATCA2	---	---	---	---	2-5
green ephedra	EPVI	---	---	---	---	2-5
range ratany	KRPA	---	---	---	2-5	---
spiny menodora	MESP2	---	---	---	2-5	---
white brittlebush	ENFA	---	---	---	T-8	---
white burrobrush	HYSA	---	---	---	2-5	---
white bursage	AMDU2	---	---	---	35-45	---
Range site number		030XB076NV	none	029XY077NV	030XB134NV	029XY029NV
Potential production (lb/acre):						
Favorable years		300		700	700	1100
Normal years		200		500	500	800
Unfavorable years		75		300	300	600

2437--CRUZSPRING-ROCK OUTCROP COMPLEX, 15 TO 50 PERCENT SLOPES

(An X indicates that the named plant is in the potential native woodland understory and the percentage is highly variable.
Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		CRUZSPRING	ROCK OUTCROP	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Canby bluegrass	POCA	---	---	---	---	X	---
Indian ricegrass	ORHY	1-3	---	1-5	10-15	---	2-10
Sandberg bluegrass	POSE	---	---	---	2-5	X	2-10
big galleta	HIRI	---	---	2-10	---	---	---
bush muhly	MUPO2	---	---	T-5	---	---	---
desert needlegrass	STSP3	2-8	---	2-8	2-8	---	---
galleta	HIJA	---	---	---	2-8	---	1-5
muttongrass	POFE	---	---	---	---	X	---
needleandthread	STCO4	---	---	---	15-25	---	---
prairie junegrass	KOPY	---	---	---	---	X	---
eriogonum	ERIOG	---	---	---	---	X	---
Nevada ephedra	EPNE	2-5	---	---	---	---	---
Stansbury cliffrose	COMES	T-8	---	---	---	---	---
Wyoming big sagebrush	ARTRW	---	---	---	30-35	X	---
big sagebrush	ARTR2	---	---	---	---	---	25-35
blackbrush	CORA	60-75	---	40-60	---	---	---
creosotebush	LATR2	---	---	2-5	---	---	---
desert bitterbrush	PUGL2	2-8	---	---	---	X	---
desert peachbrush	PRFA	---	---	---	---	---	10-20
ephedra	EPHED	2-5	---	---	2-8	---	---
fourwing saltbush	ATCA2	---	---	---	2-5	---	---
mountain big sagebrush	ARVA2	---	---	---	---	X	---
rubber rabbitbrush	CHNA2	---	---	---	---	---	5-15
singleleaf pinyon	PIMO	---	---	---	---	X	---
Range site number		029XY077NV	none	030XB076NV	029XY010NV	029XY065NV	029XY009NV
Potential production (lb/acre):							
Favorable years		700		300	500	500	1000
Normal years		500		200	350	300	700
Unfavorable years		300		75	250	200	500

2441--LEWDLAC-SANWELL ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		LEWDLAC	SANWELL	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-5	2-5	2-5	T-5
big galleta	HIRI	---	---	40-50	---
bush muhly	MUPO2	---	---	5-15	---
desert needlegrass	STSP3	2-5	2-5	2-10	---
Mojave buckwheat	ERFAP	---	---	5-15	---
creosotebush	LATR2	25-35	25-35	5-15	50-70
desert pepperweed	LEFR2	---	---	---	2-10
ephedra	EPHED	---	---	5-10	---
range ratany	KRPA	---	---	2-5	---
shadscale	ATCO	40-50	40-50	15-25	---
white bursage	AMDU2	---	---	T-8	2-8
Anderson wolfberry	LYAN	---	---	5-10	---
Nevada ephedra	EPNE	---	---	2-10	---
Bud sagebrush	ARSP5	---	---	2-10	---
Range site number		030XA053NV	030XA053NV	030XA060NV	030XA073NV
Potential production (lb/acre):					
Favorable years		200	200	300	200
Normal years		100	100	180	100
Unfavorable years		50	50	80	50

2451--SANWELL-SANWELL, WARM-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		SANWELL	SANWELL	YERMO	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-5	T-5	2-5	T-5	2-5	T-5
desert needlegrass	STSP3	2-5	T-8	2-5	---	2-5	---
creosotebush	LATR2	25-35	10-25	25-35	50-70	25-35	50-70
desert pepperweed	LEFR2	---	---	---	2-10	---	2-10
shadscale	ATCO	40-50	---	40-50	---	40-50	---
white bursage	AMDU2	---	30-45	---	2-8	---	2-8
Range site number		030XA053NV	030XA058NV	030XA053NV	030XA073NV	030XA053NV	030XA073NV
Potential production (lb/acre):							
Favorable years		200	350	200	200	200	200
Normal years		100	200	100	100	100	100
Unfavorable years		50	100	50	50	50	50

2461--NOWOY-SKELON ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		NOWOY	SKELON	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-8	2-5	2-5	5-10	2-5
big galleta	HIRI	---	---	2-5	---	---
desert needlegrass	STSP3	---	2-5	2-5	5-10	2-5
sand dropseed	SPCR	---	---	---	5-10	---
Nevada ephedra	EPNE	---	---	2-5	---	---
blackbrush	CORA	---	---	60-85	---	---
cattle saltbush	ATPO	15-25	---	---	---	---
creosotebush	LATR2	---	25-35	25-35	10-20	25-35
fourwing saltbush	ATCA2	5-10	---	---	10-15	---
shadscale	ATCO	20-40	40-50	40-50	---	40-50
white bursage	AMDU2	5-15	---	---	5-10	---
winterfat	EULA5	---	---	---	10-15	---
Range site number		030XA057NV	030XA053NV	030XA053NV	030XA069NV	030XA053NV
Potential production (lb/acre):						
Favorable years		400	200	200	400	200
Normal years		300	100	100	250	100
Unfavorable years		150	50	50	100	50

2471--LEWDLAC-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		LEWDLAC	YERMO	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-5	2-5	2-5	T-5	T-5
desert needlegrass	STSP3	2-5	2-5	2-5	---	---
creosotebush	LATR2	25-35	25-35	25-35	50-70	50-70
desert pepperweed	LEFR2	---	---	---	2-10	2-10
shadscale	ATCO	40-50	40-50	40-50	---	---
white bursage	AMDU2	---	---	---	2-8	2-8
Range site number		030XA053NV	030XA053NV	030XA053NV	030XA073NV	030XA073NV
Potential production (lb/acre):						
Favorable years		200	200	200	200	200
Normal years		100	100	100	100	100
Unfavorable years		50	50	50	50	50

2481--BACHO-GREYEAGLE ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		BACHO	GREYEAGLE	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-15	T-15	T-15	T-15
desert needlegrass	STSP3	2-8	2-8	2-8	2-8
Nevada ephedra	EPNE	2-8	2-8	2-8	2-8
bud sagebrush	ARSP5	5-10	5-10	5-10	5-10
shadscale	ATCO	30-40	30-40	30-40	30-40
spiny menodora	MESP2	5-15	5-15	5-15	5-15
white bursage	AMDU2	5-15	5-15	5-15	5-15
Range site number		030XA051NV	030XA051NV	030XA051NV	030XA051NV
Potential production (lb/acre):					
Favorable years		400	400	400	400
Normal years		300	300	300	300
Unfavorable years		100	100	100	100

2482--BACHO-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		BACHO	YERMO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-15	2-5	T-15	T-15
desert needlegrass	STSP3	2-8	2-10	2-8	2-8
Anderson wolfberry	LYAN	---	5-10	---	---
Nevada ephedra	EPNE	2-8	2-10	2-8	2-8
Shockley goldenhead	ACSH	---	1-5	---	---
bud sagebrush	ARSP5	5-10	2-10	5-10	5-10
creosotebush	LATR2	---	5-15	---	---
shadscale	ATCO	30-40	15-25	30-40	30-40
spiny menodora	MESP2	5-15	1-5	5-15	5-15
white bursage	AMDU2	5-15	---	5-15	5-15
Range site number		030XA051NV	030XA061NV	030XA051NV	030XA051NV
Potential production (lb/acre):					
Favorable years		400	300	400	400
Normal years		300	150	300	300
Unfavorable years		100	50	100	100

2491--DOWNEYVILLE-BLACKTOP-TOKOPER ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		DOWNEYVILLE	BLACKTOP	TOKOPER	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	5-10	2-5	5-10	5-10	15-25
bottlebrush squirreltail	SIHY	2-5	---	2-5	---	2-5
desert needlegrass	STSP3	2-8	---	2-8	---	---
galleta	HIJA	5-15	---	5-15	---	2-10
Bailey greasewood	SAVEB	5-15	5-15	5-15	2-10	0-10
Cooper wolfberry	LYCO2	---	1-5	---	2-5	---
Nevada dalea	PSP0	---	1-5	---	---	---
Nevada ephedra	EPNE	2-5	---	2-5	2-5	1-5
bud sagebrush	ARSP5	5-10	---	5-10	---	5-15
burrobrush	HYMEN3	---	---	---	5-10	---
fourwing saltbush	ATCA2	---	---	---	5-15	---
littleleaf horsebrush	TEGL	---	---	---	5-10	---
rubber rabbitbrush	CHNA2	---	---	---	10-25	---
shadscale	ATCO	25-35	50-70	25-35	---	25-35
winterfat	EULA5	5-10	---	5-10	---	5-10
Range site number		029XY022NV	029XY033NV	029XY022NV	029XY041NV	029XY017NV
Potential production (lb/acre):						
Favorable years		400	100	400	500	500
Normal years		250	50	250	300	350
Unfavorable years		100	25	100	100	150

2492--DOWNEYVILLE-SILVERBOW-ROCK OUTCROP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		DOWNEYVILLE	SILVERBOW	ROCK OUTCROP	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	5-10	15-25	---	5-10	5-10	2-5
bottlebrush squirreltail	SIHY	2-5	2-5	---	---	2-5	---
desert needlegrass	STSP3	2-8	---	---	---	2-8	---
galleta	HIJA	5-15	2-10	---	---	5-15	---
Bailey greasewood	SAVEB	5-15	0-10	---	2-10	5-15	5-15
Cooper wolfberry	LYCO2	---	---	---	2-5	---	1-5
Nevada dalea	PSPO	---	---	---	---	---	1-5
Nevada ephedra	EPNE	2-5	1-5	---	2-5	2-5	---
bud sagebrush	ARSP5	5-10	5-15	---	---	5-10	---
burrobrush	HYMEN3	---	---	---	5-10	---	---
fourwing saltbush	ATCA2	---	---	---	5-15	---	---
littleleaf horsebrush	TEGL	---	---	---	5-10	---	---
rubber rabbitbrush	CHNA2	---	---	---	10-25	---	---
shadscale	ATCO	25-35	25-35	---	---	25-35	50-70
winterfat	EULA5	5-10	5-10	---	---	5-10	---

Range site number	029XY022NV	029XY017NV	none	029XY041NV	029XY022NV	029XY033NV
Potential production (lb/acre):						
Favorable years	400	500		500	400	100
Normal years	250	350		300	250	50
Unfavorable years	100	150		100	100	25

2493--DOWNEYVILLE-TOGNONI-STONELL ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		DOWNEYVILLE	TOGNONI	STONELL	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	5-10	5-10	15-25	5-10	5-10
bottlebrush squirreltail	SIHY	2-5	2-5	2-5	---	2-5
desert needlegrass	STSP3	2-8	2-8	---	---	2-8
galleta	HIJA	5-15	5-15	2-10	---	5-15
Bailey greasewood	SAVEB	5-15	5-15	0-10	2-10	5-15
Cooper wolfberry	LYCO2	---	---	---	2-5	---
Nevada ephedra	EPNE	2-5	2-5	1-5	2-5	2-5
bud sagebrush	ARSP5	5-10	5-10	5-15	---	5-10
burrobrush	HYMEN3	---	---	---	5-10	---
fourwing saltbush	ATCA2	---	---	---	5-15	---
littleleaf horsebrush	TEGL	---	---	---	5-10	---
rubber rabbitbrush	CHNA2	---	---	---	10-25	---
shadscale	ATCO	25-35	25-35	25-35	---	25-35
winterfat	EULA5	5-10	5-10	5-10	---	5-10

Range site number	029XY022NV	029XY022NV	029XY017NV	029XY041NV	029XY022NV
Potential production (lb/acre):					
Favorable years	400	400	500	500	400
Normal years	250	250	350	300	250
Unfavorable years	100	100	150	100	100

2494---DOWNEYVILLE-VINDICATOR-STEWVAL ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		DOWNEYVILLE	VINDICATOR	STEWVAL	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	5-10	5-15	10-20	10-15	5-10
Sandberg bluegrass	POSE	---	---	---	2-5	---
bottlebrush squirreltail	SIHY	2-5	1-3	---	---	---
desert needlegrass	STSP3	2-8	2-5	---	2-8	---
galleta	HIJA	5-15	5-10	2-8	2-8	---
needleandthread	STCO4	---	---	5-15	15-25	---
Anderson wolfberry	LYAN	---	5-15	---	---	---
Bailey greasewood	SAVEB	5-15	---	---	---	2-10
Cooper wolfberry	LYCO2	---	2-5	---	---	2-5
Nevada dalea	PSPO	---	5-10	---	---	---
Nevada ephedra	EPNE	2-5	---	2-8	---	2-5
Wyoming big sagebrush	ARTRW	---	---	---	30-35	---
black sagebrush	ARARN	---	---	35-45	---	---
bud sagebrush	ARSP5	5-10	2-5	---	---	---
burrobrush	HYMEN3	---	---	---	---	5-10
ephedra	EPHED	---	---	---	2-8	---
fourwing saltbush	ATCA2	---	---	---	2-5	5-15
littleleaf horsebrush	TEGL	---	---	---	---	5-10
rubber rabbitbrush	CHNA2	---	---	---	---	10-25
shadscale	ATCO	25-35	---	1-5	---	---
spiny hopsage	GRSP	---	5-15	---	---	---
winterfat	EULA5	5-10	---	---	---	---
Range site number		029XY022NV	029XY021NV	029XY014NV	029XY010NV	029XY041NV
Potential production (lb/acre):						
Favorable years		400	300	350	500	500
Normal years		250	200	200	350	300
Unfavorable years		100	100	75	250	100

2495--DOWNEYVILLE-GABBEVALLY ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		DOWNEYVILLE	GABBEVALLY	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	5-10	10-15	2-5	10-20	2-5
Sandberg bluegrass	POSE	---	2-5	---	---	---
bottlebrush squirreltail	SIHY	2-5	---	---	---	---
desert needlegrass	STSP3	2-8	2-8	---	---	2-5
galleta	HIJA	5-15	2-8	---	2-8	---
needleandthread	STCO4	---	15-25	---	5-15	---
Anderson wolfberry	LYAN	---	---	---	---	5-10
Bailey greasewood	SAVEB	5-15	---	5-15	---	---
Cooper wolfberry	LYCO2	---	---	1-5	---	---
Nevada dalea	PSPO	---	---	1-5	---	---
Nevada ephedra	EPNE	2-5	---	---	2-8	2-5
Wyoming big sagebrush	ARTRW	---	30-35	---	---	---
black sagebrush	ARARN	---	---	---	35-45	---
bud sagebrush	ARSP5	5-10	---	---	---	---
creosotebush	LATR2	---	---	---	---	10-20
ephedra	EPHED	---	2-8	---	---	---
fourwing saltbush	ATCA2	---	2-5	---	---	---
shadscale	ATCO	25-35	---	50-70	1-5	10-25
spiny menodora	MESP2	---	---	---	---	5-15
white bursage	AMDU2	---	---	---	---	5-10
winterfat	EULA5	5-10	---	---	---	---
Range site number		029XY022NV	029XY010NV	029XY033NV	029XY014NV	030XA068NV
Potential production (lb/acre):						
Favorable years		400	500	100	350	250
Normal years		250	350	50	200	150
Unfavorable years		100	250	25	75	50

2496--DOWNEYVILLE-PINTWATER-UPSPRING ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		DOWNEYVILLE	PINTWATER	UPSPRING	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	5-10	5-10	2-5	10-15	---
Sandberg bluegrass	POSE	---	---	---	2-5	---
bottlebrush squirreltail	SIHY	2-5	2-5	---	---	---
desert needlegrass	STSP3	2-8	2-8	2-5	2-8	---
galleta	HIJA	5-15	5-15	---	2-8	---
needleandthread	STCO4	---	---	---	15-25	---
Anderson wolfberry	LYAN	---	---	5-10	---	---
Bailey greasewood	SAVEB	5-15	5-15	---	---	---
Nevada ephedra	EPNE	2-5	2-5	2-5	---	---
Wyoming big sagebrush	ARTRW	---	---	---	30-35	---
bud sagebrush	ARSP5	5-10	5-10	---	---	---
creosotebush	LATR2	---	---	10-20	---	---
ephedra	EPHED	---	---	---	2-8	---
fourwing saltbush	ATCA2	---	---	---	2-5	---
shadscale	ATCO	25-35	25-35	10-25	---	---
spiny menodora	MESP2	---	---	5-15	---	---
white bursage	AMDU2	---	---	5-10	---	---
winterfat	EULA5	5-10	5-10	---	---	---
Range site number		029XY022NV	029XY022NV	030XA068NV	029XY010NV	none
Potential production (lb/acre):						
Favorable years		400	400	250	500	
Normal years		250	250	150	350	
Unfavorable years		100	100	50	250	

2500--COMMSKI-GREYEAGLE ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		COMMSKI	GREYEAGLE	Inclusion 1
Indian ricegrass	ORHY	T-5	2-8	2-5
desert needlegrass	STSP3	---	---	2-10
Anderson wolfberry	LYAN	---	---	5-10
Cooper wolfberry	LYCO2	---	2-5	---
Nevada ephedra	EPNE	---	---	2-10
Shockley goldenhead	ACSH	---	---	1-5
bud sagebrush	ARSP5	---	---	2-10
creosotebush	LATR2	50-70	10-20	5-15
desert pepperweed	LEFR2	2-10	---	---
shadscale	ATCO	---	15-25	15-25
spiny menodora	MESP2	---	---	1-5
white bursage	AMDU2	2-8	30-40	---

Range site number	030XA073NV	030XA066NV	030XA061NV
Potential production (lb/acre):			
Favorable years	200	350	300
Normal years	100	200	150
Unfavorable years	50	100	50

2501--WANOMIE-CORBILT ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		WANOMIE	CORBILT	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-8	2-8	2-8	---	2-8
desert needlegrass	STSP3	5-10	5-10	5-10	---	5-10
shadscale	ATCO	30-50	30-50	30-50	---	30-50
white burrobrush	HYSa	2-5	2-5	2-5	---	2-5
wolfberry	LYCIU	2-5	2-5	2-5	---	2-5

Range site number	030XA050NV	030XA050NV	030XA050NV	none	030XA050NV
Potential production (lb/acre):					
Favorable years	200	200	200		200
Normal years	100	100	100		100
Unfavorable years	50	50	50		50

2510--FUEGOSTA-TOMEL-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		FUEGOSTA	TOMEL	IZO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	15-25	15-25	5-10	10-15	15-25
bottlebrush squirreltail	SIHY	2-5	2-5	---	---	2-5
galleta	HIJA	2-10	2-10	---	2-8	2-10
Bailey greasewood	SAVEB	0-10	0-10	2-10	5-15	0-10
Cooper wolfberry	LYCO2	---	---	2-5	---	---
Nevada ephedra	EPNE	1-5	1-5	2-5	2-8	1-5
bud sagebrush	ARSP5	5-15	5-15	---	2-5	5-15
burrobrush	HYMEN3	---	---	5-10	---	---
fourwing saltbush	ATCA2	---	---	5-15	---	---
littleleaf horsebrush	TEGL	---	---	5-10	---	---
rubber rabbitbrush	CHNA2	---	---	10-25	---	---
shadscale	ATCO	25-35	25-35	---	5-15	25-35
spiny menodora	MESP2	---	---	---	35-45	---
winterfat	EULA5	5-10	5-10	---	---	5-10

Range site number	029XY017NV	029XY017NV	029XY041NV	029XY036NV	029XY017NV
Potential production (lb/acre):					
Favorable years	500	500	500	400	500
Normal years	350	350	300	300	350
Unfavorable years	150	150	100	100	150

2511--FUEGOSTA-WARDENOT-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		FUEGOSTA	WARDENOT	IZO	Inclusion 1
Indian ricegrass	ORHY	15-25	15-25	5-10	15-25
bottlebrush squirreltail	SIHY	2-5	2-5	---	2-5
galleta	HIJA	2-10	2-10	---	2-10
Bailey greasewood	SAVEB	0-10	0-10	2-10	0-10
Cooper wolfberry	LYCO2	---	---	2-5	---
Nevada ephedra	EPNE	1-5	1-5	2-5	1-5
bud sagebrush	ARSP5	5-15	5-15	---	5-15
burrobrush	HYMEN3	---	---	5-10	---
fourwing saltbush	ATCA2	---	---	5-15	---
littleleaf horsebrush	TEGL	---	---	5-10	---
rubber rabbitbrush	CHNA2	---	---	10-25	---
shadscale	ATCO	25-35	25-35	---	25-35
winterfat	EULA5	5-10	5-10	---	5-10

Range site number	029XY017NV	029XY017NV	029XY041NV	029XY017NV
Potential production (lb/acre):				
Favorable years	500	500	500	500
Normal years	350	350	300	350
Unfavorable years	150	150	100	150

2520--VIGUS-FUEGOSTA-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		VIGUS	FUEGOSTA	IZO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	15-25	15-25	5-10	5-10	5-10
bottlebrush squirreltail	SIHY	2-5	2-5	---	---	---
galleta	HIJA	2-10	2-10	---	---	---
Bailey greasewood	SAVEB	0-10	0-10	2-10	2-10	2-10
Cooper wolfberry	LYCO2	---	---	2-5	2-5	2-5
Nevada ephedra	EPNE	1-5	1-5	2-5	2-5	2-5
bud sagebrush	ARSP5	5-15	5-15	---	---	---
burrobrush	HYMEN3	---	---	5-10	5-10	5-10
fourwing saltbush	ATCA2	---	---	5-15	5-15	5-15
littleleaf horsebrush	TEGL	---	---	5-10	5-10	5-10
rubber rabbitbrush	CHNA2	---	---	10-25	10-25	10-25
shadscale	ATCO	25-35	25-35	---	---	---
winterfat	EULA5	5-10	5-10	---	---	---
Range site number		029XY017NV	029XY017NV	029XY041NV	029XY041NV	029XY041NV
Potential production (lb/acre):						
Favorable years		500	500	500	500	500
Normal years		350	350	300	300	300
Unfavorable years		150	150	100	100	100

2521--VIGUS-WARDENOT-FUEGOSTA ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		VIGUS	WARDENOT	FUEGOSTA	Inclusion 1
Indian ricegrass	ORHY	15-25	15-25	15-25	5-10
bottlebrush squirreltail	SIHY	2-5	2-5	2-5	---
galleta	HIJA	2-10	2-10	2-10	---
Bailey greasewood	SAVEB	0-10	0-10	0-10	2-10
Cooper wolfberry	LYCO2	---	---	---	2-5
Nevada ephedra	EPNE	1-5	1-5	1-5	2-5
bud sagebrush	ARSP5	5-15	5-15	5-15	---
burrobrush	HYMEN3	---	---	---	5-10
fourwing saltbush	ATCA2	---	---	---	5-15
littleleaf horsebrush	TEGL	---	---	---	5-10
rubber rabbitbrush	CHNA2	---	---	---	10-25
shadscale	ATCO	25-35	25-35	25-35	---
winterfat	EULA5	5-10	5-10	5-10	---
Range site number		029XY017NV	029XY017NV	029XY017NV	029XY041NV
Potential production (lb/acre):					
Favorable years		500	500	500	500
Normal years		350	350	350	300
Unfavorable years		150	150	150	100

2531--LAXAL-STONELL-UNSEL ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		LAXAL	STONELL	UNSEL	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	15-25	15-25	15-25	5-10	15-25
bottlebrush squirreltail	SIHY	2-5	2-5	2-5	---	2-5
galleta	HIJA	2-10	2-10	2-10	---	2-10
Bailey greasewood	SAVEB	0-10	0-10	0-10	2-10	0-10
Cooper wolfberry	LYCO2	---	---	---	2-5	---
Nevada ephedra	EPNE	1-5	1-5	1-5	2-5	1-5
bud sagebrush	ARSP5	5-15	5-15	5-15	---	5-15
burrobrush	HYMEN3	---	---	---	5-10	---
fourwing saltbush	ATCA2	---	---	---	5-15	---
littleleaf horsebrush	TEGL	---	---	---	5-10	---
rubber rabbitbrush	CHNA2	---	---	---	10-25	---
shadscale	ATCO	25-35	25-35	25-35	---	25-35
winterfat	EULA5	5-10	5-10	5-10	---	5-10
Range site number		029XY017NV	029XY017NV	029XY017NV	029XY041NV	029XY017NV
Potential production (lb/acre):						
Favorable years		500	500	500	500	500
Normal years		350	350	350	300	350
Unfavorable years		150	150	150	100	150

2532--LAXAL-FANG ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		LAXAL	FANG	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	15-25	20-30	5-10	15-25
bottlebrush squirreltail	SIHY	2-5	---	---	2-5
galleta	HIJA	2-10	2-8	---	2-10
sand dropseed	SPCR	---	2-8	---	---
globemallow	SPHAE	---	1-3	---	---
Bailey greasewood	SAVEB	0-10	---	2-10	0-10
Cooper wolfberry	LYCO2	---	---	2-5	---
Nevada ephedra	EPNE	1-5	---	2-5	1-5
bud sagebrush	ARSP5	5-15	2-8	---	5-15
burrobrush	HYMEN3	---	---	5-10	---
fourwing saltbush	ATCA2	---	20-30	5-15	---
littleleaf horsebrush	TEGL	---	---	5-10	---
rubber rabbitbrush	CHNA2	---	---	10-25	---
shadscale	ATCO	25-35	---	---	25-35
spiny hopsage	GRSP	---	2-5	---	---
winterfat	EULA5	5-10	10-20	---	5-10
Range site number		029XY017NV	029XY046NV	029XY041NV	029XY017NV
Potential production (lb/acre):					
Favorable years		500	500	500	500
Normal years		350	400	300	350
Unfavorable years		150	300	100	150

2540--LIDAN-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		LIDAN	IZO	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	15-25	5-10	20-35	15-25	25-35
bottlebrush squirreltail	SIHY	2-5	---	---	2-5	---
desert needlegrass	STSP3	---	---	2-8	---	---
galleta	HIJA	2-10	---	---	2-10	10-15
needleandthread	STCO4	---	---	5-15	---	---
Anderson wolfberry	LYAN	---	---	---	---	2-5
Bailey greasewood	SAVEB	0-10	2-10	---	0-10	---
Cooper wolfberry	LYCO2	---	2-5	---	---	---
Nevada ephedra	EPNE	1-5	2-5	2-5	1-5	10-15
Wyoming big sagebrush	ARTRW	---	---	25-35	---	---
bud sagebrush	ARSP5	5-15	---	---	5-15	2-5
burrobrush	HYMEN3	---	5-10	---	---	---
fourwing saltbush	ATCA2	---	5-15	2-5	---	2-8
littleleaf horsebrush	TEGL	---	5-10	---	---	---
rubber rabbitbrush	CHNA2	---	10-25	---	---	---
shadscale	ATCO	25-35	---	---	25-35	---
spiny hopsage	GRSP	---	---	---	---	15-30
winterfat	EULA5	5-10	---	---	5-10	2-5
Range site number						
		029XY017NV	029XY041NV	029XY006NV	029XY017NV	029XY016NV
Potential production (lb/acre):						
Favorable years		500	500	800	500	1000
Normal years		350	300	600	350	700
Unfavorable years		150	100	300	150	500

2550--STONEWALL-IZO-LIDAN ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		STONEWALL	IZO	LIDAN	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	15-25	5-10	15-25	20-35	25-35
bottlebrush squirreltail	SIHY	2-5	---	2-5	---	---
desert needlegrass	STSP3	---	---	---	2-8	---
galleta	HIJA	2-10	---	2-10	---	10-15
needleandthread	STCO4	---	---	---	5-15	---
Anderson wolfberry	LYAN	---	---	---	---	2-5
Bailey greasewood	SAVEB	0-10	2-10	0-10	---	---
Cooper wolfberry	LYCO2	---	2-5	---	---	---
Nevada ephedra	EPNE	1-5	2-5	1-5	2-5	10-15
Wyoming big sagebrush	ARTRW	---	---	---	25-35	---
bud sagebrush	ARSP5	5-15	---	5-15	---	2-5
burrobrush	HYMEN3	---	5-10	---	---	---
fourwing saltbush	ATCA2	---	5-15	---	2-5	2-8
littleleaf horsebrush	TEGL	---	5-10	---	---	---
rubber rabbitbrush	CHNA2	---	10-25	---	---	---
shadscale	ATCO	25-35	---	25-35	---	---
spiny hopsage	GRSP	---	---	---	---	15-30
winterfat	EULAS	5-10	---	5-10	---	2-5

Range site number	029XY017NV	029XY041NV	029XY017NV	029XY006NV	029XY016NV
Potential production (lb/acre):					
Favorable years	500	500	500	800	1000
Normal years	350	300	350	600	700
Unfavorable years	150	100	150	300	500

2570--STARGO-PLAYAS ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		STARGO	PLAYAS	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	15-25	---	15-25	2-10	15-25
bottlebrush squirreltail	SIHY	2-5	---	2-5	2-5	2-5
galleta	HIJA	2-10	---	2-10	---	2-10
Bailey greasewood	SAVEB	0-10	---	0-10	---	0-10
Nevada ephedra	EPNE	1-5	---	1-5	---	1-5
black greasewood	SAVE4	---	---	---	20-35	---
bud sagebrush	ARSP5	5-15	---	5-15	5-15	5-15
fourwing saltbush	ATCA2	---	---	---	2-5	---
shadscale	ATCO	25-35	---	25-35	30-50	25-35
winterfat	EULAS	5-10	---	5-10	---	5-10

Range site number	029XY017NV	none	029XY017NV	029XY024NV	029XY017NV
Potential production (lb/acre):					
Favorable years	500		500	700	500
Normal years	350		350	500	350
Unfavorable years	150		150	300	150

2580--WARDENOT-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		WARDENOT	IZO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	15-25	5-10	5-10	50-70
bottlebrush squirreltail	SIHY	2-5	---	---	---
galleta	HIJA	2-10	---	---	2-5
needleandthread	STCO4	---	---	---	2-5
sand dropseed	SPCR	---	---	---	5-15
Bailey greasewood	SAVEB	0-10	2-10	2-10	---
Cooper wolfberry	LYCO2	---	2-5	2-5	---
Nevada ephedra	EPNE	1-5	2-5	2-5	---
bud sagebrush	ARSP5	5-15	---	---	---
burrobrush	HYMEN3	---	5-10	5-10	---
fourwing saltbush	ATCA2	---	5-15	5-15	15-25
littleleaf horsebrush	TEGL	---	5-10	5-10	---
rubber rabbitbrush	CHNA2	---	10-25	10-25	---
shadscale	ATCO	25-35	---	---	---
winterfat	EULA5	5-10	---	---	2-8

Range site number	029XY017NV	029XY041NV	029XY041NV	029XY012NV
Potential production (lb/acre):				
Favorable years	500	500	500	700
Normal years	350	300	300	500
Unfavorable years	150	100	100	300

2601--COBATUS-KAWICH COMPLEX, 0 TO 2 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		COBATUS	KAWICH	Inclusion 1
Baltic rush	JUBA	1-5	---	---
Indian ricegrass	ORHY	---	20-30	2-8
alkali sacaton	SPAI	20-40	---	---
basin wildrye	ELCI2	25-35	---	---
bottlebrush squirreltail	SIHY	---	---	1-3
galleta	HIJA	---	---	1-3
inland saltgrass	DISPS2	2-10	2-5	---
Bailey greasewood	SAVEB	---	---	5-10
black greasewood	SAVE4	5-15	30-50	10-20
fourwing saltbush	ATCA2	---	2-5	---
rabbitbrush	CHRY89	1-5	---	---
shadscale	ATCO	---	2-5	40-50

Range site number	029XY004NV	027XY016NV	029XY063NV
Potential production (lb/acre):			
Favorable years	1600	500	250
Normal years	1100	300	100
Unfavorable years	800	150	50

2611--CORBILT VERY GRAVELLY SANDY LOAM, 0 TO 8 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		CORBILT	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-15	T-15	---
desert needlegrass	STSP3	2-8	2-8	---
Nevada ephedra	EPNE	2-8	2-8	---
bud sagebrush	ARSP5	5-10	5-10	---
shadscale	ATCO	30-40	30-40	---
spiny menodora	MESP2	5-15	5-15	---
white bursage	AMDU2	5-15	5-15	---
Range site number		030XA051NV	030XA051NV	none
Potential production (lb/acre):				
Favorable years		400	400	
Normal years		300	300	
Unfavorable years		100	100	

2630--WECHECH-COMMSKI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		WECHECH	COMMSKI	Inclusion 1
Indian ricegrass	ORHY	T-5	T-5	2-5
desert needlegrass	STSP3	---	T-8	2-5
creosotebush	LATR2	50-70	10-25	25-35
desert pepperweed	LEFR2	2-10	---	---
shadscale	ATCO	---	---	40-50
white bursage	AMDU2	2-8	30-45	---
Range site number		030XA073NV	030XA058NV	030XA053NV
Potential production (lb/acre):				
Favorable years		200	350	200
Normal years		100	200	100
Unfavorable years		50	100	50

2640--DOWNEYVILLE-ADVOKAY-PINTWATER ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		DOWNEYVILLE	ADVOKAY	PINTWATER	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	5-10	15-25	5-10	2-5	---	10-20
bottlebrush squirreltail	SIHY	2-5	2-5	2-5	---	---	---
desert needlegrass	STSP3	2-8	---	2-8	---	---	---
galleta	HIJA	5-15	2-10	5-15	---	---	2-8
needleandthread	STCO4	---	---	---	---	---	5-15
Bailey greasewood	SAVEB	5-15	0-10	5-15	5-15	---	---
Cooper wolfberry	LYCO2	---	---	---	1-5	---	---
Nevada dalea	PSPO	---	---	---	1-5	---	---
Nevada ephedra	EPNE	2-5	1-5	2-5	---	---	2-8
black sagebrush	ARARN	---	---	---	---	---	35-45
bud sagebrush	ARSP5	5-10	5-15	5-10	---	---	---
shadscale	ATCO	25-35	25-35	25-35	50-70	---	1-5
winterfat	EULA5	5-10	5-10	5-10	---	---	---
Range site number		029XY022NV	029XY017NV	029XY022NV	029XY033NV	none	029XY014NV
Potential production (lb/acre):							
Favorable years		400	500	400	100		350
Normal years		250	350	250	50		200
Unfavorable years		100	150	100	25		75

2641--ADVOKAY-ARDIVEY-LEO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		ADVOKAY	ARDIVEY	LEO	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	15-25	10-15	20-30	---	2-10	10-15
Sandberg bluegrass	POSE	---	---	---	---	2-10	2-5
bottlebrush squirreltail	SIHY	2-5	---	---	---	---	---
desert needlegrass	STSP3	---	---	---	---	---	2-8
galleta	HIJA	2-10	2-8	2-8	---	1-5	2-8
needleandthread	STCO4	---	---	---	---	---	15-25
sand dropseed	SPCR	---	---	2-8	---	---	---
globemallow	SPHAE	---	---	1-3	---	---	---
Bailey greasewood	SAVEB	0-10	5-15	---	---	---	---
Nevada ephedra	EPNE	1-5	2-8	---	---	---	---
Wyoming big sagebrush	ARTRW	---	---	---	---	---	30-35
big sagebrush	ARTR2	---	---	---	---	25-35	---
bud sagebrush	ARSP5	5-15	2-5	2-8	---	---	---
desert peachbrush	PRFA	---	---	---	---	10-20	---
ephedra	EPHED	---	---	---	---	---	2-8
fourwing saltbush	ATCA2	---	---	20-30	---	---	2-5
rubber rabbitbrush	CHNA2	---	---	---	---	5-15	---
shadscale	ATCO	25-35	5-15	---	---	---	---
spiny hopsage	GRSP	---	---	2-5	---	---	---
spiny menodora	MESP2	---	35-45	---	---	---	---
winterfat	EULA5	5-10	---	10-20	---	---	---
Range site number		029XY017NV	029XY036NV	029XY046NV	none	029XY009NV	029XY010NV
Potential production (lb/acre):							
Favorable years		500	400	500		1000	500
Normal years		350	300	400		700	350
Unfavorable years		150	100	300		500	250

2642--ADVOKAY-BLACKTOP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		ADVOKAY	BLACKTOP	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	15-25	2-5	5-10	15-25
bottlebrush squirreltail	SIHY	2-5	---	---	2-5
galleta	HIJA	2-10	---	---	2-10
Bailey greasewood	SAVEB	0-10	5-15	2-10	0-10
Cooper wolfberry	LYCO2	---	1-5	2-5	---
Nevada dalea	PSPO	---	1-5	---	---
Nevada ephedra	EPNE	1-5	---	2-5	1-5
bud sagebrush	ARSP5	5-15	---	---	5-15
burrobrush	HYMEN3	---	---	5-10	---
fourwing saltbush	ATCA2	---	---	5-15	---
littleleaf horsebrush	TEGL	---	---	5-10	---
rubber rabbitbrush	CHNA2	---	---	10-25	---
shadscale	ATCO	25-35	50-70	---	25-35
winterfat	EULA5	5-10	---	---	5-10
Range site number		029XY017NV	029XY033NV	029XY041NV	029XY017NV
Potential production (lb/acre):					
Favorable years		500	100	500	500
Normal years		350	50	300	350
Unfavorable years		150	25	100	150

2650--LUNING-WARDENOT-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		LUNING	WARDENOT	IZO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	45-60	15-25	5-10	15-25	15-25
bottlebrush squirreltail	SIHY	---	2-5	---	2-5	2-5
galleta	HIJA	---	2-10	---	2-10	2-10
sand dropseed	SPCR	2-5	---	---	---	---
globemallow	SPHAE	1-3	---	---	---	---
Bailey greasewood	SAVEB	---	0-10	2-10	0-10	0-10
Cooper wolfberry	LYCO2	5-15	---	2-5	---	---
Nevada dalea	PSPO	2-8	---	---	---	---
Nevada ephedra	EPNE	---	1-5	2-5	1-5	1-5
bud sagebrush	ARSP5	---	5-15	---	5-15	5-15
burrobrush	HYMEN3	---	---	5-10	---	---
fourwing saltbush	ATCA2	20-30	---	5-15	---	---
littleleaf horsebrush	TEGL	---	---	5-10	---	---
rubber rabbitbrush	CHNA2	---	---	10-25	---	---
shadscale	ATCO	---	25-35	---	25-35	25-35
winterfat	EULA5	2-8	5-10	---	5-10	5-10
Range site number		029XY034NV	029XY017NV	029XY041NV	029XY017NV	029XY017NV
Potential production (lb/acre):						
Favorable years		450	500	500	500	500
Normal years		250	350	300	350	350
Unfavorable years		100	150	100	150	150

2660--STONELL-WARDENOT-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		STONELL	WARDENOT	IZO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	15-25	15-25	5-10	15-25	15-25
bottlebrush squirreltail	SIHY	2-5	2-5	---	2-5	2-5
galleta	HIJA	2-10	2-10	---	2-10	2-10
Bailey greasewood	SAVEB	0-10	0-10	2-10	0-10	0-10
Cooper wolfberry	LYCO2	---	---	2-5	---	---
Nevada ephedra	EPNE	1-5	1-5	2-5	1-5	1-5
bud sagebrush	ARSP5	5-15	5-15	---	5-15	5-15
burrobrush	HYMEN3	---	---	5-10	---	---
fourwing saltbush	ATCA2	---	---	5-15	---	---
littleleaf horsebrush	TEGL	---	---	5-10	---	---
rubber rabbitbrush	CHNA2	---	---	10-25	---	---
shadscale	ATCO	25-35	25-35	---	25-35	25-35
winterfat	EULAS	5-10	5-10	---	5-10	5-10
Range site number		029XY017NV	029XY017NV	029XY041NV	029XY017NV	029XY017NV
Potential production (lb/acre):						
Favorable years		500	500	500	500	500
Normal years		350	350	300	350	350
Unfavorable years		150	150	100	150	150

2670--ARDIVEY-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		ARDIVEY	IZO	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	15-25	5-10	15-25	20-30	15-25
bottlebrush squirreltail	SIHY	2-5	---	2-5	---	2-5
galleta	HIJA	2-10	---	2-10	2-8	2-10
sand dropseed	SPCR	---	---	---	2-8	---
globemallow	SPHAE	---	---	---	1-3	---
Bailey greasewood	SAVEB	0-10	2-10	0-10	---	0-10
Cooper wolfberry	LYCO2	---	2-5	---	---	---
Nevada ephedra	EPNE	1-5	2-5	1-5	---	1-5
bud sagebrush	ARSP5	5-15	---	5-15	2-8	5-15
burrobrush	HYMEN3	---	5-10	---	---	---
fourwing saltbush	ATCA2	---	5-15	---	20-30	---
littleleaf horsebrush	TEGL	---	5-10	---	---	---
rubber rabbitbrush	CHNA2	---	10-25	---	---	---
shadscale	ATCO	25-35	---	25-35	---	25-35
spiny hopsage	GRSP	---	---	---	2-5	---
winterfat	EULAS	5-10	---	5-10	10-20	5-10
Range site number		029XY017NV	029XY041NV	029XY017NV	029XY046NV	029XY017NV
Potential production (lb/acre):						
Favorable years		500	500	500	500	500
Normal years		350	300	350	400	350
Unfavorable years		150	100	150	300	150

2671--ARDIVEY-STONELL-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		ARDIVEY	STONELL	IZO	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	15-25	15-25	5-10	15-25	25-35	5-10
bottlebrush squirreltail	SIHY	2-5	2-5	---	2-5	---	2-5
desert needlegrass	STSP3	---	---	---	---	---	2-8
galleta	HIJA	2-10	2-10	---	2-10	10-15	5-15
Anderson wolfberry	LYAN	---	---	---	---	2-5	---
Bailey greasewood	SAVEB	0-10	0-10	2-10	0-10	---	5-15
Cooper wolfberry	LYCO2	---	---	2-5	---	---	---
Nevada ephedra	EPNE	1-5	1-5	2-5	1-5	10-15	2-5
bud sagebrush	ARSP5	5-15	5-15	---	5-15	2-5	5-10
burrobrush	HYMEN3	---	---	5-10	---	---	---
fourwing saltbush	ATCA2	---	---	5-15	---	2-8	---
littleleaf horsebrush	TEGL	---	---	5-10	---	---	---
rubber rabbitbrush	CHNA2	---	---	10-25	---	---	---
shadscale	ATCO	25-35	25-35	---	25-35	---	25-35
spiny hopsage	GRSP	---	---	---	---	15-30	---
winterfat	EULA5	5-10	5-10	---	5-10	2-5	5-10
Range site number		029XY017NV	029XY017NV	029XY041NV	029XY017NV	029XY016NV	029XY022NV
Potential production (lb/acre):							
Favorable years		500	500	500	500	1000	400
Normal years		350	350	300	350	700	250
Unfavorable years		150	150	100	150	500	100

2680--ESPINT-VINDICATOR ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		ESPINT	VINDICATOR	ESPINT	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	10-15	5-15	10-15	15-25	5-15	20-35
Sandberg bluegrass	POSE	2-5	---	2-5	---	---	---
bottlebrush squirreltail	SIHY	---	1-3	---	2-5	1-3	---
desert needlegrass	STSP3	2-8	2-5	2-8	---	2-5	2-8
galleta	HIJA	2-8	5-10	2-8	2-10	5-10	---
needleandthread	STCO4	15-25	---	15-25	---	---	5-15
Anderson wolfberry	LYAN	---	5-15	---	---	5-15	---
Bailey greasewood	SAVEB	---	---	---	0-10	---	---
Cooper wolfberry	LYCO2	---	2-5	---	---	2-5	---
Nevada dalea	PSPO	---	5-10	---	---	5-10	---
Nevada ephedra	EPNE	---	---	---	1-5	---	2-5
Wyoming big sagebrush	ARTRW	30-35	---	30-35	---	---	25-35
bud sagebrush	ARSP5	---	2-5	---	5-15	2-5	---
ephedra	EPHEd	2-8	---	2-8	---	---	---
fourwing saltbush	ATCA2	2-5	---	2-5	---	---	2-5
shadscale	ATCO	---	---	---	25-35	---	---
spiny hopsage	GRSP	---	5-15	---	---	5-15	---
winterfat	EULA5	---	---	---	5-10	---	---
Range site number		029XY010NV	029XY021NV	029XY010NV	029XY017NV	029XY021NV	029XY006NV
Potential production (lb/acre):							
Favorable years		500	300	500	500	300	800
Normal years		350	200	350	350	200	600
Unfavorable years		250	100	250	150	100	300

2681--ESPINT-STEWVAL-VINDICATOR ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		ESPINT	STEWVAL	VINDICATOR	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORRY	10-15	10-20	5-15	10-15	---	5-10
Sandberg bluegrass	POSE	2-5	---	---	2-5	---	---
bottlebrush squirreltail	SIHY	---	---	1-3	---	---	2-5
desert needlegrass	STSP3	2-8	---	2-5	2-8	---	2-8
galleta	HIJA	2-8	2-8	5-10	2-8	---	5-15
needleandthread	STCO4	15-25	5-15	---	15-25	---	---
Anderson wolfberry	LYAN	---	---	5-15	---	---	---
Bailey greasewood	SAVEB	---	---	---	---	---	5-15
Cooper wolfberry	LYCO2	---	---	2-5	---	---	---
Nevada dalea	PSPO	---	---	5-10	---	---	---
Nevada ephedra	EPNE	---	2-8	---	---	---	2-5
Wyoming big sagebrush	ARTRW	30-35	---	---	30-35	---	---
black sagebrush	ARARN	---	35-45	---	---	---	---
bud sagebrush	ARSP5	---	---	2-5	---	---	5-10
ephedra	EPHED	2-8	---	---	2-8	---	---
fourwing saltbush	ATCA2	2-5	---	---	2-5	---	---
shadscale	ATCO	---	1-5	---	---	---	25-35
spiny hopsage	GRSP	---	---	5-15	---	---	---
winterfat	EULA5	---	---	---	---	---	5-10
Range site number		029XY010NV	029XY014NV	029XY021NV	029XY010NV	none	029XY022NV
Potential production (lb/acre):							
Favorable years		500	350	300	500		400
Normal years		350	200	200	350		250
Unfavorable years		250	75	100	250		100

2682--ESPINT-GABVALLY-STEWVAL ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		ESPINT	GABVALLY	STEWVAL	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORRY	10-15	10-15	10-20	10-15	2-5	5-10
Sandberg bluegrass	POSE	2-5	2-5	---	2-5	---	---
bottlebrush squirreltail	SIHY	---	---	---	---	---	2-5
desert needlegrass	STSP3	2-8	2-8	---	2-8	---	2-8
galleta	HIJA	2-8	2-8	2-8	2-8	---	5-15
needleandthread	STCO4	15-25	15-25	5-15	15-25	---	---
Bailey greasewood	SAVEB	---	---	---	---	5-15	5-15
Cooper wolfberry	LYCO2	---	---	---	---	1-5	---
Nevada dalea	PSPO	---	---	---	---	1-5	---
Nevada ephedra	EPNE	---	---	2-8	---	---	2-5
Wyoming big sagebrush	ARTRW	30-35	30-35	---	30-35	---	---
black sagebrush	ARARN	---	---	35-45	---	---	---
bud sagebrush	ARSP5	---	---	---	---	---	5-10
ephedra	EPHED	2-8	2-8	---	2-8	---	---
fourwing saltbush	ATCA2	2-5	2-5	---	2-5	---	---
shadscale	ATCO	---	---	1-5	---	50-70	25-35
winterfat	EULA5	---	---	---	---	---	5-10
Range site number		029XY010NV	029XY010NV	029XY014NV	029XY010NV	029XY033NV	029XY022NV
Potential production (lb/acre):							
Favorable years		500	500	350	500	100	400
Normal years		350	350	200	350	50	250
Unfavorable years		250	250	75	250	25	100

2690--LEO-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		LEO	IZO	Inclusion 1
Indian ricegrass	ORHY	20-30	5-10	15-25
bottlebrush squirreltail	SIHY	---	---	2-5
galleta	HIJA	2-8	---	2-10
sand dropseed	SPCR	2-8	---	---
globemallow	SPHA	1-3	---	---
Bailey greasewood	SAVE	---	2-10	0-10
Cooper wolfberry	LYCO	---	2-5	---
Nevada ephedra	EPNE	---	2-5	1-5
bud sagebrush	ARSP	2-8	---	5-15
burrobrush	HYMEN	---	5-10	---
fourwing saltbush	ATCA	20-30	5-15	---
littleleaf horsebrush	TEGL	---	5-10	---
rubber rabbitbrush	CHNA	---	10-25	---
shadscale	ATCO	---	---	25-35
spiny hopsage	GRSP	2-5	---	---
winterfat	EULA	10-20	---	5-10

Range site number	029XY046NV	029XY041NV	029XY017NV
Potential production (lb/acre):			
Favorable years	500	500	500
Normal years	400	300	350
Unfavorable years	300	100	150

2701--COBATUS LOAM, DRAINED, 0 TO 2 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions	
		Soil name or Inclusion number--	
		COBATUS	Inclusion 1
Baltic rush	JUBA	---	1-5
Indian ricegrass	ORHY	2-10	---
alkali sacaton	SPAI	---	20-40
basin wildrye	ELCI	---	25-35
inland saltgrass	DISP	---	2-10
bud sagebrush	ARTR	5-10	---
black greasewood	SAVE	20-35	5-15
fourwing saltbush	ATCA	2-5	---
green ephedra	EPVI	2-5	---
rabbitbrush	CHRY	---	1-5
bottlebrush squirreltail	SIHY	2-5	---
shadscale	ATCO	30-50	---

Range site number	029XY029NV	029XY004NV
Potential production (lb/acre):		
Favorable years	500	1600
Normal years	350	1100
Unfavorable years	150	800

2710--PAPOOSE-VINDICATOR-ESPINT ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		PAPOOSE	VINDICATOR	ESPINT	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	25-35	5-15	10-15	25-35	20-35	---
Sandberg bluegrass	POSE	---	---	2-5	---	---	---
bottlebrush squirreltail	SIHY	---	1-3	---	---	---	---
desert needlegrass	STSP3	---	2-5	2-8	---	2-8	---
galleta	HIJA	10-15	5-10	2-8	10-15	---	---
needleandthread	STCO4	---	---	15-25	---	5-15	---
Anderson wolfberry	LYAN	2-5	5-15	---	2-5	---	---
Cooper wolfberry	LYCO2	---	2-5	---	---	---	---
Nevada dalea	PSPO	---	5-10	---	---	---	---
Nevada ephedra	EPNE	10-15	---	---	10-15	2-5	---
Wyoming big sagebrush	ARTRW	---	---	30-35	---	25-35	---
bud sagebrush	ARSP5	2-5	2-5	---	2-5	---	---
ephedra	EPHED	---	---	2-8	---	---	---
fourwing saltbush	ATCA2	2-8	---	2-5	2-8	2-5	---
spiny hopsage	GRSP	15-30	5-15	---	15-30	---	---
winterfat	EULA5	2-5	---	---	2-5	---	---

Range site number	029XY016NV	029XY021NV	029XY010NV	029XY016NV	029XY006NV	none
Potential production (lb/acre):						
Favorable years	1000	300	500	1000	800	
Normal years	700	200	350	700	600	
Unfavorable years	500	100	250	500	300	

2720--UNSEL-STONELL-VEET ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		UNSEL	STONELL	VEET	Inclusion 1
Indian ricegrass	ORHY	15-25	15-25	10-25	5-10
bottlebrush squirreltail	SIHY	2-5	2-5	---	---
desert needlegrass	STSP3	---	---	10-20	---
galleta	HIJA	2-10	2-10	2-8	---
needleandthread	STCO4	---	---	2-8	---
globemallow	SPHAE	---	---	1-4	---
Bailey greasewood	SAVEB	0-10	0-10	---	2-10
Cooper wolfberry	LYCO2	---	---	---	2-5
Nevada ephedra	EPNE	1-5	1-5	2-5	2-5
Wyoming big sagebrush	ARTRW	---	---	25-30	---
bud sagebrush	ARSP5	5-15	5-15	2-5	---
burrobrush	HYMEN3	---	---	---	5-10
fourwing saltbush	ATCA2	---	---	2-5	5-15
littleleaf horsebrush	TEGL	---	---	---	5-10
rubber rabbitbrush	CHNA2	---	---	---	10-25
shadscale	ATCO	25-35	25-35	---	---
spiny hopsage	GRSP	---	---	5-10	---
winterfat	EULA5	5-10	5-10	2-8	---

Range site number	029XY017NV	029XY017NV	029XY049NV	029XY041NV
Potential production (lb/acre):				
Favorable years	500	500	1100	500
Normal years	350	350	800	300
Unfavorable years	150	150	500	100

2730--GABEVALLY-BLACKTOP-ESPINT ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		GABEVALLY	BLACKTOP	ESPINT	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	10-15	2-5	10-15	15-25	5-15
Sandberg bluegrass	POSE	2-5	---	2-5	---	---
bottlebrush squirreltail	SIHY	---	---	---	2-5	---
desert needlegrass	STSP3	2-8	---	2-8	---	T-8
galleta	HIJA	2-8	---	2-8	2-10	T-5
needleandthread	STCO4	15-25	---	15-25	---	---
Bailey greasewood	SAVEB	---	5-15	---	0-10	T-10
Cooper wolfberry	LYCO2	---	1-5	---	---	---
Nevada dalea	PSPO	---	1-5	---	---	---
Nevada ephedra	EPNE	---	---	---	1-5	2-5
Wyoming big sagebrush	ARTRW	30-35	---	30-35	---	---
bud sagebrush	ARSP5	---	---	---	5-15	5-15
ephedra	EPHED	2-8	---	2-8	---	---
fourwing saltbush	ATCA2	2-5	---	2-5	---	---
shadscale	ATCO	---	50-70	---	25-35	35-50
winterfat	EULA5	---	---	---	5-10	2-10
Range site number		029XY010NV	029XY033NV	029XY010NV	029XY017NV	029XY022NV
Potential production (lb/acre):						
Favorable years		500	100	500	500	400
Normal years		350	50	350	350	250
Unfavorable years		250	25	250	150	100

2731--GABEVALLY-DOWNEYVILLE-VINDICATOR ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		GABEVALLY	DOWNEYVILLE	VINDICATOR	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	10-15	5-10	5-15	15-25	5-10
Sandberg bluegrass	POSE	2-5	---	---	---	---
bottlebrush squirreltail	SIHY	---	2-5	1-3	2-5	---
desert needlegrass	STSP3	2-8	---	2-5	---	---
galleta	HIJA	2-8	5-15	5-10	2-10	---
needleandthread	STCO4	15-25	---	---	---	---
Anderson wolfberry	LYAN	---	---	5-15	---	---
Bailey greasewood	SAVEB	---	5-15	---	0-10	2-10
Cooper wolfberry	LYCO2	---	---	2-5	---	2-5
Nevada dalea	PSPO	---	---	5-10	---	---
Nevada ephedra	EPNE	---	2-5	---	1-5	2-5
Wyoming big sagebrush	ARTRW	30-35	---	---	---	---
bud sagebrush	ARSP5	---	5-10	2-5	5-15	---
burrobrush	HYMEN3	---	---	---	---	5-10
ephedra	EPHED	2-8	---	---	---	---
fourwing saltbush	ATCA2	2-5	---	---	---	5-15
littleleaf horsebrush	TEGL	---	---	---	---	5-10
rubber rabbitbrush	CHNA2	---	---	---	---	10-25
shadscale	ATCO	---	25-35	---	25-35	---
spiny hopsage	GRSP	---	---	5-15	---	---
winterfat	EULA5	---	5-10	---	5-10	---
Range site number		029XY010NV	029XY022NV	029XY021NV	029XY017NV	029XY041NV
Potential production (lb/acre):						
Favorable years		500	400	300	500	500
Normal years		350	250	200	350	300
Unfavorable years		250	100	100	150	100

2732--GABBEVALLY-TOGNONI-DOWNEYVILLE ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		GABBEVALLY	TOGNONI	DOWNEYVILLE	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	10-15	5-10	5-10	5-10	2-5
Sandberg bluegrass	POSE	2-5	---	---	---	---
bottlebrush squirreltail	SIHY	---	2-5	2-5	2-5	---
desert needlegrass	STSP3	2-8	2-8	2-8	2-8	---
galleta	HIJA	2-8	5-15	5-15	5-15	---
needleandthread	STCO4	15-25	---	---	---	---
Bailey greasewood	SAVEB	---	5-15	5-15	5-15	5-15
Cooper wolfberry	LYCO2	---	---	---	---	1-5
Nevada dalea	PSPO	---	---	---	---	1-5
Nevada ephedra	EPNE	---	2-5	2-5	2-5	---
Wyoming big sagebrush	ARTRW	30-35	---	---	---	---
bud sagebrush	ARSP5	---	5-10	5-10	5-10	---
ephedra	EPHED	2-8	---	---	---	---
fourwing saltbush	ATCA2	2-5	---	---	---	---
shadscale	ATCO	---	25-35	25-35	25-35	50-70
winterfat	EULA5	---	5-10	5-10	5-10	---

Range site number	029XY010NV	029XY022NV	029XY022NV	029XY022NV	029XY033NV
Potential production (lb/acre):					
Favorable years	500	400	400	400	100
Normal years	350	250	250	250	50
Unfavorable years	250	100	100	100	25

2734--GABBEVALLY-DOWNEYVILLE ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		GABBEVALLY	DOWNEYVILLE	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	10-15	2-5	5-10	---
Sandberg bluegrass	POSE	2-5	---	---	---
bottlebrush squirreltail	SIHY	---	---	2-5	---
desert needlegrass	STSP3	2-8	5-10	2-8	---
galleta	HIJA	2-8	5-10	5-15	---
needleandthread	STCO4	15-25	2-8	---	---
Anderson wolfberry	LYAN	---	5-10	---	---
Bailey greasewood	SAVEB	---	5-10	5-15	---
Nevada ephedra	EPNE	---	2-8	2-5	---
Wyoming big sagebrush	ARTRW	30-35	---	---	---
bud sagebrush	ARSP5	---	2-5	5-10	---
ephedra	EPHED	2-8	---	---	---
fourwing saltbush	ATCA2	2-5	---	---	---
shadscale	ATCO	---	2-5	25-35	---
spiny menodora	MESP2	---	25-35	---	---
winterfat	EULA5	---	2-5	5-10	---

Range site number	029XY010NV	029XY037NV	029XY022NV	none
Potential production (lb/acre):				
Favorable years	500	300	400	
Normal years	350	200	250	
Unfavorable years	250	100	100	

2735--GABBVALLY-WAHGUYHE-ROCK OUTCROP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		GABBVALLY	WAHGYHE	ROCK OUTCROP	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	10-15	10-15	---	10-20	5-10	10-15
Sandberg bluegrass	POSE	2-5	2-5	---	---	---	2-5
bottlebrush squirreltail	SIHY	---	---	---	---	2-5	---
desert needlegrass	STSP3	2-8	2-8	---	---	2-8	2-8
galleta	HIJA	2-8	2-8	---	2-8	5-15	2-8
needleandthread	STCO4	15-25	15-25	---	5-15	---	15-25
Bailey greasewood	SAVEB	---	---	---	---	5-15	---
Nevada ephedra	EPNE	---	---	---	2-8	2-5	---
Wyoming big sagebrush	ARTRW	30-35	30-35	---	---	---	30-35
black sagebrush	ARARN	---	---	---	35-45	---	---
bud sagebrush	ARSP5	---	---	---	---	5-10	---
ephedra	EPHED	2-8	2-8	---	---	---	2-8
fourwing saltbush	ATCA2	2-5	2-5	---	---	---	2-5
shadscale	ATCO	---	---	---	1-5	25-35	---
winterfat	EULA5	---	---	---	---	5-10	---
Range site number		029XY010NV	029XY010NV	none	029XY014NV	029XY022NV	029XY010NV
Potential production (lb/acre):							
Favorable years		500	500		350	400	500
Normal years		350	350		200	250	350
Unfavorable years		250	250		75	100	250

2736--GABBVALLY-BRIER-ROCK OUTCROP ASSOCIATION

(An X indicates that the named plant is in the potential native woodland understory and the percentage is highly variable. Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		GABBVALLY	BRIER	ROCK OUTCROP	Inclusion 1	Inclusion 2	Inclusion 3
Canby bluegrass	POCA	---	X	---	---	---	---
Indian ricegrass	ORHY	10-15	---	---	10-20	2-10	10-15
Sandberg bluegrass	POSE	2-5	X	---	---	2-10	2-5
desert needlegrass	STSP3	2-8	---	---	---	---	2-8
galleta	HIJA	2-8	---	---	2-8	1-5	2-8
muttongrass	POFE	---	X	---	---	---	---
needleandthread	STCO4	15-25	---	---	5-15	---	15-25
prairie junegrass	KOPY	---	X	---	---	---	---
erigonum	ERIOG	---	X	---	---	---	---
Nevada ephedra	EPNE	---	---	---	2-8	---	---
Wyoming big sagebrush	ARTRW	30-35	X	---	---	---	30-35
big sagebrush	ARTR2	---	---	---	---	25-35	---
black sagebrush	ARARN	---	---	---	35-45	---	---
desert bitterbrush	PUGL2	---	X	---	---	---	---
desert peachbrush	PRFA	---	---	---	---	10-20	---
ephedra	EPHED	2-8	---	---	---	---	2-8
fourwing saltbush	ATCA2	2-5	---	---	---	---	2-5
mountain big sagebrush	ARVA2	---	X	---	---	---	---
rubber rabbitbrush	CHNA2	---	---	---	---	5-15	---
shadscale	ATCO	---	---	---	1-5	---	---
singleleaf pinyon	PIMO	---	X	---	---	---	---
Range site number		029XY010NV	029XY065NV	none	029XY014NV	029XY009NV	029XY010NV
Potential production (lb/acre):							
Favorable years		500	500		350	1000	500
Normal years		350	300		200	700	350
Unfavorable years		250	200		75	500	250

2740--TOGNONI-BLACKTOP ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		TOGNONI	BLACKTOP	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	5-10	2-5	15-25	---	5-10
bottlebrush squirreltail	SIHY	2-5	---	2-5	---	---
desert needlegrass	STSP3	2-8	---	---	---	---
galleta	HIJA	5-15	---	2-10	---	---
Bailey greasewood	SAVEB	5-15	5-15	0-10	---	2-10
Cooper wolfberry	LYCO2	---	1-5	---	---	2-5
Nevada dalea	PSPO	---	1-5	---	---	---
Nevada ephedra	EPNE	2-5	---	1-5	---	2-5
bud sagebrush	ARSP5	5-10	---	5-15	---	---
burrobrush	HYMEN3	---	---	---	---	5-10
fourwing saltbush	ATCA2	---	---	---	---	5-15
littleleaf horsebrush	TEGL	---	---	---	---	5-10
rubber rabbitbrush	CHNA2	---	---	---	---	10-25
shadscale	ATCO	25-35	50-70	25-35	---	---
winterfat	EULA5	5-10	---	5-10	---	---
Range site number		029XY022NV	029XY033NV	029XY017NV	none	029XY041NV
Potential production (lb/acre):						
Favorable years		400	100	500		500
Normal years		250	50	350		300
Unfavorable years		100	25	150		100

2741--BLACKTOP-DOWNEYVILLE-TOGNONI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		BLACKTOP	DOWNEYVILLE	TOGNONI	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-5	5-10	5-10	15-25	5-10	50-70
bottlebrush squirreltail	SIHY	---	2-5	2-5	2-5	---	---
desert needlegrass	STSP3	---	2-8	2-8	---	---	---
galleta	HIJA	---	5-15	5-15	2-10	---	2-5
needleandthread	STCO4	---	---	---	---	---	2-5
sand dropseed	SPCR	---	---	---	---	---	5-15
Bailey greasewood	SAVEB	5-15	5-15	5-15	0-10	2-10	---
Cooper wolfberry	LYCO2	1-5	---	---	---	2-5	---
Nevada dalea	PSPO	1-5	---	---	---	---	---
Nevada ephedra	EPNE	---	2-5	2-5	1-5	2-5	---
bud sagebrush	ARSP5	---	5-10	5-10	5-15	---	---
burrobrush	HYMEN3	---	---	---	---	5-10	---
fourwing saltbush	ATCA2	---	---	---	---	5-15	15-25
littleleaf horsebrush	TEGL	---	---	---	---	5-10	---
rubber rabbitbrush	CHNA2	---	---	---	---	10-25	---
shadscale	ATCO	50-70	25-35	25-35	25-35	---	---
winterfat	EULA5	---	5-10	5-10	5-10	---	2-8
Range site number		029XY033NV	029XY022NV	029XY022NV	029XY017NV	029XY041NV	029XY012NV
Potential production (lb/acre):							
Favorable years		100	400	400	500	500	700
Normal years		50	250	250	350	300	500
Unfavorable years		25	100	100	150	100	300

2750--SILVERBOW-WARDENOT-IZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		SILVERBOW	WARDENOT	IZO	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	15-25	15-25	5-10	15-25	25-35	5-10
bottlebrush squirreltail	SIHY	2-5	2-5	---	2-5	---	2-5
desert needlegrass	STSP3	---	---	---	---	---	2-8
galleta	HIJA	2-10	2-10	---	2-10	10-15	5-15
Anderson wolfberry	LYAN	---	---	---	---	2-5	---
Bailey greasewood	SAVEB	0-10	0-10	2-10	0-10	---	5-15
Cooper wolfberry	LYCO2	---	---	2-5	---	---	---
Nevada ephedra	EPNE	1-5	1-5	2-5	1-5	10-15	2-5
bud sagebrush	ARSP5	5-15	5-15	---	5-15	2-5	5-10
burrobrush	HYMEN3	---	---	5-10	---	---	---
fourwing saltbush	ATCA2	---	---	5-15	---	2-8	---
littleleaf horsebrush	TEGL	---	---	5-10	---	---	---
rubber rabbitbrush	CHNA2	---	---	10-25	---	---	---
shadscale	ATCO	25-35	25-35	---	25-35	---	25-35
spiny hopsage	GRSP	---	---	---	---	15-30	---
winterfat	EULA5	5-10	5-10	---	5-10	2-5	5-10
Range site number		029XY017NV	029XY017NV	029XY041NV	029XY017NV	029XY016NV	029XY022NV
Potential production (lb/acre):							
Favorable years		500	500	500	500	1000	400
Normal years		350	350	300	350	700	250
Unfavorable years		150	150	100	150	500	100

2760--DOWNEYVILLE-UNSEL-TOKOPER ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		DOWNEYVILLE	UNSEL	TOKOPER	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	5-10	15-25	5-10	2-5	10-15	5-10
Sandberg bluegrass	POSE	---	---	---	---	2-5	---
bottlebrush squirreltail	SIHY	2-5	2-5	2-5	---	---	2-5
desert needlegrass	STSP3	2-8	---	2-8	---	2-8	2-8
galleta	HIJA	5-15	2-10	5-15	---	2-8	5-15
needleandthread	STCO4	---	---	---	---	15-25	---
Bailey greasewood	SAVEB	5-15	0-10	5-15	5-15	---	5-15
Cooper wolfberry	LYCO2	---	---	---	1-5	---	---
Nevada dalea	PSPO	---	---	---	1-5	---	---
Nevada ephedra	EPNE	2-5	1-5	2-5	---	---	2-5
Wyoming big sagebrush	ARTRW	---	---	---	---	30-35	---
bud sagebrush	ARSP5	5-10	5-15	5-10	---	---	5-10
ephedra	EPHED	---	---	---	---	2-8	---
fourwing saltbush	ATCA2	---	---	---	---	2-5	---
shadscale	ATCO	25-35	25-35	25-35	50-70	---	25-35
winterfat	EULA5	5-10	5-10	5-10	---	---	5-10
Range site number		029XY022NV	029XY017NV	029XY022NV	029XY033NV	029XY010NV	029XY022NV
Potential production (lb/acre):							
Favorable years		400	500	400	100	500	400
Normal years		250	350	250	50	350	250
Unfavorable years		100	150	100	25	250	100

2770--BULLFOR-PANOR-BLUEPOINT ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		BULLFOR	PANOR	BLUEPOINT	Inclusion 1
Indian ricegrass	ORHY	T-15	2-5	2-15	1-5
desert needlegrass	STSP3	2-8	2-5	---	1-5
Nevada ephedra	EPNE	2-8	---	---	---
bud sagebrush	ARSP5	5-10	---	---	---
catclaw	ACGR	---	---	1-10	---
cattle saltbush	ATPO	---	---	---	5-15
creosotebush	LATR2	---	25-35	---	20-30
ephedra	EPHEd	---	---	---	2-10
fourwing saltbush	ATCA2	---	---	25-40	---
mesquite	PROSO	---	---	25-45	---
shadscale	ATCO	30-40	40-50	---	---
spiny menodora	MESFP2	5-15	---	---	---
white burrobrush	HYSA	---	---	---	10-20
white bursage	AMDU2	5-15	---	---	2-8
Range site number		030XA051NV	030XA053NV	030XY045NV	030XA065NV
Potential production (lb/acre):					
Favorable years		400	200	1500	350
Normal years		300	100	900	150
Unfavorable years		100	50	500	75

2781--HAYMONT-BLUEPOINT-PANOR COMPLEX, 0 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		HAYMONT	BLUEPOINT	PANOR	Inclusion 1	Inclusion 2
Baltic rush	JUBA	---	---	---	2-10	---
Indian ricegrass	ORHY	---	2-15	2-5	---	---
alkali sacaton	SPAI	2-8	---	---	20-40	2-8
desert needlegrass	STSP3	---	---	2-5	---	---
inland saltgrass	DISP62	5-15	---	---	5-15	2-5
sedge	CAREX	---	---	---	1-5	---
Perry saltbush	ATPA3	2-10	---	---	---	---
big saltbush	ATLE	---	---	---	5-15	---
black greasewood	SAVE4	50-65	---	---	---	---
catclaw	ACGR	---	1-10	---	---	---
cattle saltbush	ATPO	---	---	---	---	5-10
creosotebush	LATR2	---	---	25-35	---	---
desertholly	ATHY	---	---	---	---	2-5
fourwing saltbush	ATCA2	---	25-40	---	2-5	2-10
mesquite	PROSO	---	25-45	---	---	---
rubber rabbitbrush	CHNA2	---	---	---	2-5	---
seepweed	SUAED	2-5	---	---	---	---
shadscale	ATCO	2-10	---	40-50	---	20-45
wolfberry	LYCIU	---	---	---	2-5	10-20
Range site number		029XY076NV	030XY045NV	030XA053NV	030XY024NV	030XY040NV
Potential production (lb/acre):						
Favorable years		450	1500	200	1600	800
Normal years		250	900	100	900	600
Unfavorable years		100	500	50	300	200

2810--ASHMED-YERMO-NIAVI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions						
		Soil name or Inclusion number--						
		ASHMED	YERMO	NIAVI	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4
Indian ricegrass	ORHY	---	T-5	T-5	---	1-5	T-5	1-5
big galleta	HIRI	T-8	---	2-10	T-8	---	---	---
desert needlegrass	STSP3	---	T-8	2-8	---	1-5	---	---
California bearpoppy	ARCA4	---	---	---	---	---	---	2-8
Anderson wolfberry	LYAN	---	---	2-5	---	---	---	---
Mojave buckwheat	ERFAP	---	---	5-10	---	---	---	---
Nevada ephedra	EPNE	T-5	---	---	T-5	---	---	---
Virgin River encelia	ENFRV	---	---	2-8	---	---	---	---
cattle saltbush	ATPO	---	---	---	---	5-15	---	---
creosotebush	LATR2	10-25	10-25	2-8	10-25	20-30	50-70	---
desert pepperweed	LEFR2	---	---	---	---	---	2-10	---
desertholly	ATHY	---	---	---	---	---	---	20-45
ephedra	EPHED	---	---	5-10	---	2-10	---	---
range ratany	KRPA	2-5	---	2-5	2-5	---	---	---
seepweed	SUAED	---	---	---	---	---	---	10-20
spiny menodora	MESP2	---	---	2-5	---	---	---	---
white brittlebush	ENFA	---	---	T-8	---	---	---	---
white burrobrush	HYSA	---	---	2-5	---	10-20	---	---
white bursage	AMDU2	25-50	30-45	35-45	25-50	2-8	2-8	---
wolfberry	LYCIU	---	---	---	---	---	---	5-15
Range site number		030XB005NV	030XA058NV	030XB134NV	030XB005NV	030XA065NV	030XA073NV	030XA060NV
Potential production (lb/acre):								
Favorable years		500	350	700	500	350	200	100
Normal years		300	200	500	300	150	100	50
Unfavorable years		200	100	300	200	75	50	25

2820--STROZI-CORBILT ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		STROZI	CORBILT	Inclusion 1
Indian ricegrass	ORHY	---	2-8	50-70
desert needlegrass	STSP3	---	5-10	---
galleta	HIJA	---	---	2-5
needleandthread	STCO4	---	---	2-5
sand dropseed	SPCR	---	---	5-15
fourwing saltbush	ATCA2	1-5	---	15-25
shadscale	ATCO	20-90	30-50	---
white burrobrush	HYSA	---	2-5	---
winterfat	EULA5	---	---	2-8
wolfberry	LYCIU	---	2-5	---
Range site number		030XY013NV	030XA050NV	029XY012NV
Potential production (lb/acre):				
Favorable years		150	200	700
Normal years		100	100	500
Unfavorable years		50	50	300

2840--ARMPUP-STROZI ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		ARMPUP	STROZI	Inclusion 1
Indian ricegrass	ORHY	---	T-15	---
alkali sacaton	SPAI	1-5	---	---
desert needlegrass	STSP3	---	2-8	---
inland saltgrass	DISPS2	1-5	---	---
Nevada ephedra	EPNE	---	2-8	---
bud sagebrush	ARSP5	---	5-10	---
creosotebush	LATR2	1-5	---	---
desertholly	ATHY	5-20	---	---
shadscale	ATCO	---	30-40	---
spiny menodora	MESP2	---	5-15	---
white bursage	AMDU2	---	5-15	---

Range site number	030XY025NV	030XA051NV	none
Potential production (lb/acre):			
Favorable years	300	400	
Normal years	100	300	
Unfavorable years	50	100	

2850--SCOTTCAS-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		SCOTTCAS	YERMO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-5	2-5	1-5	2-5
desert needlegrass	STSP3	2-10	2-10	1-5	2-10
Anderson wolfberry	LYAN	5-10	5-10	---	5-10
Nevada dalea	PSPO	---	---	2-5	---
Nevada ephedra	EPNE	2-10	2-10	---	2-10
Shockley goldenhead	ACSH	1-5	1-5	---	1-5
bladdersage	SAME	---	---	5-10	---
bud sagebrush	ARSP5	2-10	2-10	---	2-10
cattle saltbush	ATPO	---	---	5-10	---
creosotebush	LATR2	5-15	5-15	15-25	5-15
shadscale	ATCO	15-25	15-25	---	15-25
spiny menodora	MESP2	1-5	1-5	---	1-5
white burrobrush	HYSB	---	---	5-10	---
white bursage	AMDU2	---	---	5-10	---
wolfberry	LYCIU	---	---	2-5	---

Range site number	030XA061NV	030XA061NV	030XA076NV	030XA061NV
Potential production (lb/acre):				
Favorable years	300	300	600	300
Normal years	150	150	400	150
Unfavorable years	50	50	200	50

2860--SEZNA-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		SEZNA	YERMO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-5	T-5	T-5	1-5
desert needlegrass	STSP3	---	T-8	---	1-5
Nevada dalea	PSPO	---	---	---	2-5
bladdersage	SAME	---	---	---	5-10
cattle saltbush	ATPO	---	---	---	5-10
creosotebush	LATR2	50-70	10-25	50-70	15-25
desert pepperweed	LEFR2	2-10	---	2-10	---
white burrobrush	HYSA	---	---	---	5-10
white bursage	AMDU2	2-8	30-45	2-8	5-10
wolfberry	LYCIU	---	---	---	2-5
Range site number		030XA073NV	030XA058NV	030XA073NV	030XA076NV
Potential production (lb/acre):					
Favorable years		200	350	200	600
Normal years		100	200	100	400
Unfavorable years		50	100	50	200

2870--KANACKY VERY GRAVELLY LOAM, 15 TO 50 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		KANACKY	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-8	---	1-5
desert needlegrass	STSP3	5-10	---	1-5
Nevada ephedra	EPNE	2-8	---	2-5
blackbrush	CORA	---	---	60-80
creosotebush	LATR2	10-20	---	---
shadscale	ATCO	20-35	---	---
white bursage	AMDU2	10-15	---	---
winterfat	EULA5	---	---	1-5
Range site number		030XA059NV	none	030XA095NV
Potential production (lb/acre):				
Favorable years		250		300
Normal years		150		175
Unfavorable years		50		75

2880--BACHO-YERMO-ARIZO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		BACHO	YERMO	ARIZO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-8	2-5	1-5	2-8	2-8
desert needlegrass	STSP3	---	2-10	1-5	---	---
Anderson wolfberry	LYAN	---	5-10	---	---	---
Cooper wolfberry	LYCO2	2-5	---	---	2-5	2-5
Nevada ephedra	EPNE	---	2-10	---	---	---
Shockley goldenhead	ACSH	---	1-5	---	---	---
bud sagebrush	ARSP5	---	2-10	---	---	---
cattle saltbush	ATPO	---	---	5-15	---	---
creosotebush	LATR2	10-20	5-15	20-30	10-20	10-20
ephedra	EPHED	---	---	2-10	---	---
shadscale	ATCO	15-25	15-25	---	15-25	15-25
spiny menodora	MESP2	---	1-5	---	---	---
white burrobrush	HYSA	---	---	10-20	---	---
white bursage	AMDU2	30-40	---	2-8	30-40	30-40
Range site number		030XA066NV	030XA061NV	030XA065NV	030XA066NV	030XA066NV
Potential production (lb/acre):						
Favorable years		350	300	350	350	350
Normal years		200	150	150	200	200
Unfavorable years		100	50	75	100	100

2890--NOPAH-WODA-GULLIED LAND ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		NOPAH	WODA	GULLIED LAND	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	2-5	---	2-5	2-8
desert needlegrass	STSP3	---	2-5	---	2-5	---
Torrey quailbush	ATTO	2-10	---	---	---	---
cattle saltbush	ATPO	---	---	---	---	15-25
creosotebush	LATR2	---	25-35	---	25-35	---
fourwing saltbush	ATCA2	5-15	---	---	---	5-10
rubber rabbitbrush	CHNA2	2-5	---	---	---	---
shadscale	ATCO	15-25	40-50	---	40-50	20-40
spinescale saltbush	ATSP	10-20	---	---	---	---
white bursage	AMDU2	---	---	---	---	5-15
wolfberry	LYCIU	2-5	---	---	---	---
Range site number		030XA062NV	030XA053NV	none	030XA053NV	030XA057NV
Potential production (lb/acre):						
Favorable years		700	200		200	400
Normal years		500	100		100	300
Unfavorable years		200	50		50	150

2900--PLAYAS

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		PLAYAS			

Range site number none

Potential production (lb/acre):

Favorable years

Normal years

Unfavorable years

2901--PLAYAS-CORBILT-BLUEPOINT ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		PLAYAS	CORBILT	BLUEPOINT	Inclusion 1
Indian ricegrass	ORHY	---	2-8	2-15	2-5
desert needlegrass	STSP3	---	5-10	---	2-5
catclaw	ACGR	---	---	1-10	---
creosotebush	LATR2	---	---	---	25-35
fourwing saltbush	ATCA2	---	---	25-40	---
mesquite	PROSO	---	---	25-45	---
shadscale	ATCO	---	30-50	---	40-50
white burrobrush	HYSA	---	2-5	---	---
wolfberry	LYCIU	---	2-5	---	---

Range site number none 030XA050NV 030XY045NV 030XA053NV

Potential production (lb/acre):

Favorable years

Normal years

Unfavorable years

200

100

50

1500

900

500

200

100

50

2903--PLAYAS-MOBL-KAWICH COMPLEX, 0 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		PLAYAS	MOBL	KAWICH	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	---	2-8	20-30	T-5	---
desert needlegrass	STSP3	---	5-10	---	T-8	---
inland saltgrass	DISPS2	---	---	2-5	---	2-10
black greasewood	SAVE4	---	---	30-50	---	60-70
creosotebush	LATR2	---	---	---	10-25	---
fourwing saltbush	ATCA2	---	---	2-5	---	---
seepweed	SUAED	---	---	---	---	2-8
shadscale	ATCO	---	30-50	2-5	---	2-10
white burrobrush	HYSA	---	2-5	---	---	---
white bursage	AMDU2	---	---	---	30-45	---
wolfberry	LYCIU	---	2-5	---	---	---

Range site number	none	030XA050NV	027XY016NV	030XA058NV	027XY025NV
Potential production (lb/acre):					
Favorable years		200	500	350	500
Normal years		100	300	200	350
Unfavorable years		50	150	100	200

2910--DUNE LAND

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		DUNE LAND				

Range site number	none
Potential production (lb/acre):	
Favorable years	
Normal years	
Unfavorable years	

2920--DUMPS, MINE

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions
		Soil name or Inclusion number--
		DUMPS

Range site number none

Potential production (lb/acre):

Favorable years

Normal years

Unfavorable years

2930--SERALIN-ROCK OUTCROP-SED ASSOCIATION

(An X indicates that the named plant is in the potential native woodland understory and the percentage is highly variable.

Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions							
		Soil name or Inclusion number--							
		SERALIN	ROCK OUTCROP	SED	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4	Inclusion 5
Canby bluegrass	POCA	---	---	X	---	X	---	---	---
Indian ricegrass	ORHY	---	---	---	---	---	1-3	---	2-8
Sandberg bluegrass	POSE	X	---	X	---	---	---	X	---
arid needlegrass	STAR	---	---	---	---	---	---	---	2-8
bottlebrush squirreltail	SIHY	X	---	---	---	X	---	X	---
desert needlegrass	STSP3	---	---	---	---	---	2-8	---	---
muttongrass	POFE	X	---	X	X	X	---	X	---
prairie junegrass	KOPY	---	---	X	---	---	---	---	---
erigonum	ERIOG	---	---	X	---	---	---	---	---
Gambel oak	QUGA	X	---	---	---	X	---	X	---
Nevada ephedra	EPNE	---	---	---	---	---	2-5	---	---
Stansbury cliffrose	COMES	X	---	---	---	---	T-8	X	---
Utah agave	AGUT	---	---	---	---	---	---	---	T-8
Utah serviceberry	AMUT	X	---	---	---	X	---	X	10-25
Utah juniper	JUOS	X	---	X	X	---	---	X	---
Wyoming big sagebrush	ARTRW	---	---	X	---	---	---	---	---
blackbrush	CORA	---	---	---	---	---	60-75	---	---
black sagebrush	ARARN	X	---	---	---	---	---	X	10-20
desert bitterbrush	FUGL2	---	---	X	---	---	2-8	---	---
ephedra	EPHD	X	---	---	---	---	2-5	X	5-10
goldenweed	HAPLO2	---	---	---	X	---	---	---	---
greenleaf manzanita	ARPA6	X	---	---	---	X	---	X	---
mountain big sagebrush	ARVA2	---	---	X	X	X	---	---	---
yellowleaf silktassel	GAFL2	X	---	---	X	---	---	X	---
pointleaf manzanita	ARPU5	---	---	---	---	---	---	---	10-25
ponderosa pine	PIPO	---	---	---	---	X	---	---	---
singleleaf pinyon	PIMO	X	---	X	X	---	---	X	---

Range site number	029XY135NV	none	029XY065NV	029XY067NV	029XY086NV	029XY077NV	029XY135NV	029XY137NV
Potential production (lb/acre):								
Favorable years	600		500	500	700	700	600	500
Normal years	450		300	400	500	500	450	350
Unfavorable years	300		200	200	300	300	300	250

2940--SCHADER-SED-CRUZSPRING ASSOCIATION

(An X indicates that the named plant is in the potential native woodland understory and the percentage is highly variable.
Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions							
		Soil name or Inclusion number--							
		SCHADER	SED	CRUZSPRING	Inclusion 1	Inclusion 2	Inclusion 3	Inclusion 4	Inclusion 5
Canby bluegrass	POCA	---	X	---	---	X	---	---	X
Indian ricegrass	ORHY	10-15	---	1-3	---	X	2-10	---	---
Sandberg bluegrass	POSE	2-5	X	---	---	X	2-10	X	---
bottlebrush squirreltail	SIHY	---	---	---	---	X	---	X	X
desert needlegrass	STSP3	2-8	---	2-8	---	X	---	---	---
galleta	HIJA	2-8	---	---	---	---	1-5	---	---
muttongrass	POFE	---	X	---	---	X	---	X	X
needleandthread	STCO4	15-25	---	---	---	X	---	---	---
prairie junegrass	KOPY	---	X	---	---	---	---	---	---
erigonum	ERIOG	---	X	---	---	---	---	---	---
Gambel oak	QUGA	---	---	---	---	---	---	X	X
Nevada ephedra	EPNE	---	---	2-5	---	---	---	---	---
Stansbury cliffrose	COMES	---	---	T-8	---	---	---	X	---
Utah serviceberry	AMUT	---	---	---	---	X	---	X	X
Utah juniper	JUOS	---	X	---	---	X	---	X	---
Wyoming big sagebrush	ARTRW	30-35	X	---	---	X	---	---	---
big sagebrush	ARTR2	---	---	---	---	---	25-35	---	---
blackbrush	CORA	---	---	60-75	---	---	---	---	---
black sagebrush	ARARN	---	---	---	---	---	---	X	---
desert bitterbrush	PUGL2	---	X	2-8	---	X	---	---	---
desert peachbrush	PRFA	---	---	---	---	---	10-20	---	---
ephedra	EPHED	2-8	---	2-5	---	X	---	X	---
fourwing saltbush	ATCA2	2-5	---	---	---	---	---	---	---
greenleaf manzanita	ARPA6	---	---	---	---	---	---	X	X
mountain big sagebrush	ARVA2	---	X	---	---	X	---	---	X
rubber rabbitbrush	CHNA2	---	---	---	---	---	5-15	---	---
ponderosa pine	PIPO	---	---	---	---	---	---	---	X
singleleaf pinyon	PIMO	---	X	---	---	X	---	X	---

Range site number	029XY010NV	029XY065NV	029XY077NV	none	029XY067NV	029XY009NV	029XY135NV	029XY086NV
Potential production (lb/acre):								
Favorable years	500	500	700	700	500	1000	600	700
Normal years	350	300	500	500	400	700	450	500
Unfavorable years	250	200	300	300	200	500	300	300

2950--PITS, GRAVEL

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions							
		Soil name or Inclusion number--							
		PITS							

Range site number	none
Potential production (lb/acre):	
Favorable years	
Normal years	
Unfavorable years	

2951--PITS, CLAY

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions
		Soil name or Inclusion number--
		PITS

Range site number none

Potential production (lb/acre):

Favorable years

Normal years

Unfavorable years

2960--TOMEL-ARDIVEY-WARDENOT ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		TOMEL	ARDIVEY	WARDENOT	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	10-15	10-15	15-25	5-10	15-25
bottlebrush squirreltail	SIHY	---	---	2-5	---	2-5
galleta	HIJA	2-8	2-8	2-10	---	2-10
Bailey greasewood	SAVEB	5-15	5-15	0-10	2-10	0-10
Cooper wolfberry	LYCO2	---	---	---	2-5	---
Nevada ephedra	EPNE	2-8	2-8	1-5	2-5	1-5
bud sagebrush	ARSP5	2-5	2-5	5-15	---	5-15
burrobrush	HYMEN3	---	---	---	5-10	---
fourwing saltbush	ATCA2	---	---	---	5-15	---
littleleaf horsebrush	TEGL	---	---	---	5-10	---
rubber rabbitbrush	CHNA2	---	---	---	10-25	---
shadscale	ATCO	5-15	5-15	25-35	---	25-35
spiny menodora	MESP2	35-45	35-45	---	---	---
winterfat	EULA5	---	---	5-10	---	5-10
Range site number		029XY036NV	029XY036NV	029XY017NV	029XY041NV	029XY017NV
Potential production (lb/acre):						
Favorable years		400	400	500	500	500
Normal years		300	300	350	300	350
Unfavorable years		100	100	150	100	150

2961--TOMEL-BREKO-WARDENOT ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		TOMEL	BREKO	WARDENOT	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	10-15	20-35	10-15	10-25	5-10
desert needlegrass	STSP3	---	2-8	---	10-20	---
galleta	HIJA	2-8	---	2-8	2-8	---
needleandthread	STCO4	---	5-15	---	2-8	---
globemallow	SPHAE	---	---	---	1-4	---
Bailey greasewood	SAVEB	5-15	---	5-15	---	2-10
Cooper wolfberry	LYCO2	---	---	---	---	2-5
Nevada ephedra	EPNE	2-8	2-5	2-8	2-5	2-5
Wyoming big sagebrush	ARTRW	---	25-35	---	25-30	---
bud sagebrush	ARSP5	2-5	---	2-5	2-5	---
burrobrush	HYMEN3	---	---	---	---	5-10
fourwing saltbush	ATCA2	---	2-5	---	2-5	5-15
littleleaf horsebrush	TEGL	---	---	---	---	5-10
rubber rabbitbrush	CHNA2	---	---	---	---	10-25
shadscale	ATCO	5-15	---	5-15	---	---
spiny hopsage	GRSP	---	---	---	5-10	---
spiny manodora	MESP2	35-45	---	35-45	---	---
winterfat	EULA5	---	---	---	2-8	---

Range site number	029XY036NV	029XY006NV	029XY036NV	029XY049NV	029XY041NV
Potential production (lb/acre):					
Favorable years	400	800	400	1100	500
Normal years	300	600	300	800	300
Unfavorable years	100	300	100	500	100

2970--DESTAZO-NOWOY-GULLIED LAND ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		DESTAZO	NOWOY	GULLIED LAND	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-5	1-5	---	1-5	2-8
desert needlegrass	STSP3	2-5	---	---	1-5	5-10
California bearpoppy	ARCA4	---	2-8	---	---	---
cattle saltbush	ATPO	---	---	---	5-15	---
creosotebush	LATR2	25-35	---	---	20-30	---
desertholly	ATHY	---	20-45	---	---	---
ephedra	EPHED	---	---	---	2-10	---
seepweed	SUAED	---	10-20	---	---	---
shadscale	ATCO	40-50	---	---	---	30-50
white burrobrush	HYSA	---	---	---	10-20	2-5
white bursage	AMDU2	---	---	---	2-8	---
wolfberry	LYCIU	---	5-15	---	---	2-5

Range site number	030XA053NV	030XA060NV	none	030XA065NV	030XA050NV
Potential production (lb/acre):					
Favorable years	200	100		350	200
Normal years	100	50		150	100
Unfavorable years	50	25		75	50

2971--UPSPRING VERY GRAVELLY SANDY LOAM, 8 TO 15 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		UPSPRING	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	1-5	---
desert needlegrass	STSP3	2-8	2-8	---
Anderson wolfberry	LYAN	5-10	5-10	---
ephedra	EPHED	5-10	5-10	---
shadscale	ATCO	20-45	20-45	---
spiny menodora	MESF2	2-10	2-10	---
white bursage	AMDU2	2-5	2-5	---
Range site number		030XA044NV	030XA044NV	none
Potential production (lb/acre):				
Favorable years		250	250	
Normal years		150	150	
Unfavorable years		50	50	

2990--LEALANDIC-ASHMED ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		LEALANDIC	ASHMED	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	T-5	2-8	T-5	T-5	1-5
big galleta	HIRI	---	---	---	---	---
bush muhly	MUPO2	---	---	---	---	---
desert needlegrass	STSP3	T-8	---	T-8	T-8	1-5
Cooper wolfberry	LYCO2	---	2-5	---	---	---
cattle saltbush	ATPO	---	---	---	---	5-15
creosotebush	LATR2	10-25	10-20	10-25	10-25	20-30
ephedra	EPHED	---	---	---	---	2-10
shadscale	ATCO	---	15-25	---	---	---
white burrobrush	HYSA	---	---	---	---	10-20
white bursage	AMDU2	30-45	30-40	30-45	30-45	2-8
Range site number		030XA058NV	030XA066NV	030XA058NV	030XA058NV	030XA065NV
Potential production (lb/acre):						
Favorable years		350	350	500	350	350
Normal years		200	200	300	200	150
Unfavorable years		100	100	100	100	75

3021--CASAGA-DESTAZO-YURM COMPLEX, 2 TO 8 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		CASAGA	DESTAZO	YURM	Inclusion 1
Indian ricegrass	ORHY	1-5	2-5	2-5	2-5
desert needlegrass	STSP3	---	2-5	2-5	2-5
California bearpoppy	ARCA4	2-8	---	---	---
creosotebush	LATR2	---	25-35	25-35	25-35
desertholly	ATHY	20-45	---	---	---
seepweed	SUAED	10-20	---	---	---
shadscale	ATCO	---	40-50	40-50	40-50
wolfberry	LYCIU	5-15	---	---	---
Range site number		030XA060NV	030XA053NV	030XA053NV	030XA053NV
Potential production (lb/acre):					
Favorable years		100	200	200	200
Normal years		50	100	100	100
Unfavorable years		25	50	50	50

3022--CASAGA-WODA-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		CASAGA	WODA	YERMO	Inclusion 1
Indian ricegrass	ORHY	---	1-5	2-5	1-5
alkali sacaton	SPAI	1-5	---	---	---
desert needlegrass	STSP3	---	---	2-10	---
inland saltgrass	DISPS2	1-5	---	---	---
California bearpoppy	ARCA4	---	2-8	---	2-8
Anderson wolfberry	LYAN	---	---	5-10	---
Nevada ephedra	EPNE	---	---	2-10	---
Shockley goldenhead	ACSH	---	---	1-5	---
bud sagebrush	ARSP5	---	---	2-10	---
creosotebush	LATR2	1-5	---	5-15	---
desertholly	ATHY	5-20	20-45	---	20-45
seepweed	SUAED	---	10-20	---	10-20
shadscale	ATCO	25-35	---	15-25	---
spiny menodora	MESP2	---	---	1-5	---
wolfberry	LYCIU	---	5-15	---	5-15
Range site number		030XY025NV	030XA060NV	030XA061NV	030XA060NV
Potential production (lb/acre):					
Favorable years		300	100	300	100
Normal years		100	50	150	50
Unfavorable years		50	25	50	25

3052--BOBNBOB-CASLO COMPLEX, 0 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		BOBNBOB	CASLO	Inclusion 1	Inclusion 2	Inclusion 3
Baltic rush	JUBA	2-10	---	2-10	2-10	2-10
alkali sacaton	SPAI	20-40	---	20-40	20-40	20-40
common reed	PHCO15*	---	5-15	---	---	---
inland saltgrass	DISPS2	5-15	---	5-15	5-15	5-15
rush	JUNCU	---	20-35	---	---	---
sedge	CAREX	1-5	15-25	1-5	1-5	1-5
big saltbush	ATLE	5-15	---	5-15	5-15	5-15
fourwing saltbush	ATCA2	2-5	---	2-5	2-5	2-5
rubber rabbitbrush	CHNA2	2-5	---	2-5	2-5	2-5
wolfberry	LYCIU	2-5	---	2-5	2-5	2-5

Range site number	030XY024NV	030XY022NV	030XY024NV	030XY024NV	030XY024NV
Potential production (lb/acre):					
Favorable years	1600	5000	1600	1600	1600
Normal years	900	2800	900	900	900
Unfavorable years	300	1500	300	300	300

3101--BLUEPOINT-BESHERM COMPLEX, 2 TO 15 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		BLUEPOINT	BESHERM	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-15	1-5	---	---
alkali sacaton	SPAI	---	---	2-8	30-50
inland saltgrass	DISPS2	---	---	2-5	10-15
rush	JUNCU	---	---	---	10-20
sedge	CAREX	---	---	---	2-5
Torrey quailbush	ATTO	---	2-10	---	---
catclaw	ACGR	1-10	---	---	---
cattle saltbush	ATPO	---	---	5-10	---
desertholly	ATHY	---	---	2-5	---
fourwing saltbush	ATCA2	25-40	5-15	2-10	---
mesquite	PROSO	25-45	---	---	---
rubber rabbitbrush	CHNA2	---	2-5	---	---
shadscale	ATCO	---	15-25	20-45	---
spinescale saltbush	ATSP	---	10-20	---	---
wolfberry	LYCIU	---	2-5	10-20	---

Range site number	030XY045NV	030XA062NV	030XY040NV	030XY023NV
Potential production (lb/acre):				
Favorable years	1500	700	800	3000
Normal years	900	500	600	1500
Unfavorable years	500	200	200	1000

3120--NOWOY-TANAZZA-YURM ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		NOWOY	TANAZZA	YURM	Inclusion 1
Indian ricegrass	ORHY	2-5	1-5	2-5	2-5
big galleta	HIRI	---	---	---	5-15
black grama	BOER4	---	---	---	10-20
desert needlegrass	STSP3	2-5	---	2-5	2-8
galleta	HLJA	---	---	---	T-5
California bearpoppy	ARCA4	---	2-8	---	---
Nevada ephedra	EPNE	---	---	---	2-5
blackbrush	CORA	---	---	---	60-70
creosotebush	LATR2	25-35	---	25-35	2-5
desertholly	ATHY	---	20-45	---	---
seepweed	SUAED	---	10-20	---	---
shadscale	ATCO	40-50	---	40-50	---
wolfberry	LYCIU	---	5-15	---	---
Range site number		030XA053NV	030XA060NV	030XA053NV	030XB029NV
Potential production (lb/acre):					
Favorable years		200	100	200	500
Normal years		100	50	100	350
Unfavorable years		50	25	50	250

3150--CASAGA GRAVELLY LOAM, 2 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		CASAGA	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	2-8	2-5	2-15
desert needlegrass	STSP3	5-10	2-5	---
catclaw	ACGR	---	---	1-10
creosotebush	LATR2	---	25-35	---
fourwing saltbush	ATCA2	---	---	25-40
mesquite	PROSO	---	---	25-45
shadscale	ATCO	30-50	40-50	---
white burrobrush	HYSA	2-5	---	---
wolfberry	LYCIU	2-5	---	---
Range site number		030XA050NV	030XA053NV	030XY045NV
Potential production (lb/acre):				
Favorable years		200	200	1500
Normal years		100	100	900
Unfavorable years		50	50	500

3230--ALKO-CASAGA ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions		
		Soil name or Inclusion number--		
		ALKO	CASAGA	Inclusion 1
Indian ricegrass	ORRY	1-5	---	---
alkali sacaton	SPAI	---	1-5	---
big galleta	HIRI	---	---	5-10
bush muhly	MUPO2	---	---	1-5
inland saltgrass	DISPS2	---	1-5	---
Nevada ephedra	EPNE	---	---	1-5
baccharis	BACCH	---	---	5-15
bursage	FRANS*	---	---	5-20
creosotebush	LATR2	30-50	1-5	5-20
desertholly	ATHY	---	5-20	---
erigonum	ERIOG	---	---	1-5
shadscale	ATCO	10-30	25-35	---
white burrobrush	HYSA	---	---	2-5

Range site number	030XA047NV	030XY025NV	030XB028NV
Potential production (lb/acre):			
Favorable years	75	300	500
Normal years	50	100	350
Unfavorable years	25	50	200

3252--BOBNBOB-COBATUS COMPLEX, 0 TO 2 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		BOBNBOB	COBATUS	Inclusion 1	Inclusion 2
Baltic rush	JUBA	---	2-10	---	---
alkali sacaton	SPAI	30-50	20-40	50-70	2-8
inland saltgrass	DISPS2	10-15	5-15	2-8	2-5
rush	JUNCU	10-20	---	---	---
sedge	CAREX	2-5	1-5	---	---
big saltbush	ATLE	---	5-15	2-10	---
cattle saltbush	ATPO	---	---	---	5-10
desertholly	ATHY	---	---	---	2-5
fourwing saltbush	ATCA2	---	2-5	---	2-10
gumweed	GRIND	---	---	2-5	---
mesquite	PROSO	---	---	5-20	---
rubber rabbitbrush	CHNA2	---	2-5	---	---
shadscale	ATCO	---	---	---	20-45
wolfberry	LYCIU	---	2-5	---	10-20

Range site number	030XY023NV	030XY024NV	030XY048NV	030XY040NV
Potential production (lb/acre):				
Favorable years	3000	1600	1600	800
Normal years	1500	900	1200	600
Unfavorable years	1000	300	900	200

3302--RUMPAH CLAY

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions	
		Soil name or Inclusion number--	
		RUMPAH	Inclusion 1
Indian ricegrass	ORHY	2-5	2-8
Nevada ephedra	EPNE	1-5	---
cattle saltbush	ATPO	---	15-25
fourwing saltbush	ATCA2	45-65	5-10
shadscale	ATCO	2-10	20-40
spinescale saltbush	ATSP	1-5	---
white bursage	AMDU2	---	5-15
Range site number		030XA070NV	030XA057NV
Potential production (lb/acre):			
Favorable years		200	400
Normal years		100	300
Unfavorable years		25	150

3313--BESHERM CLAY LOAM

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		BESHERM	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	1-5	1-5	1-5	2-5
desert needlegrass	STSP3	---	1-5	---	---
Nevada ephedra	EPNE	---	2-5	1-5	---
Torrey quailbush	ATTO	2-10	---	2-10	2-10
blackbrush	CORA	---	60-80	---	---
fourwing saltbush	ATCA2	5-15	15-35	5-15	45-65
rubber rabbitbrush	CHNA2	2-5	---	2-5	2-5
shadscale	ATCO	15-25	30-60	15-25	2-10
spinescale saltbush	ATSP	10-20	---	10-20	10-20
winterfat	EULA5	---	1-5	---	---
wolfberry	LYCIU	2-5	---	---	2-5
alkali sacaton	SPAI	---	40-60	---	---
Range site number		030XA062NV	030XA097NV	030XA062NV	030XA070NV
Potential production (lb/acre):					
Favorable years		700	800	700	200
Normal years		500	500	500	100
Unfavorable years		200	300	200	25

3320--HAYMONT VERY FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		HAYMONT	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	1-5	1-5	2-5	T-5
desert needlegrass	STSP3	---	---	2-5	---
Torrey quailbush	ATTO	2-10	2-10	---	---
creosotebush	LATR2	---	---	25-35	50-70
desert pepperweed	LEFR2	---	---	---	2-10
fourwing saltbush	ATCA2	5-15	5-15	---	---
rubber rabbitbrush	CHNA2	2-5	2-5	---	---
shadscale	ATCO	15-25	15-25	40-50	---
spinescale saltbush	ATSP	10-20	10-20	---	---
white bursage	AMDU2	---	---	---	2-8
wolfberry	LYCIU	2-5	2-5	---	---

Range site number	030XA062NV	030XA062NV	030XA053NV	030XA073NV
Potential production (lb/acre):				
Favorable years	700	700	200	200
Normal years	500	500	100	100
Unfavorable years	200	200	50	50

3333--NOPAH LOAM

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		NOPAH	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	1-5	1-5	2-5	1-5
alkali sacaton	SPAI	---	---	30-50	---
basin wildrye	ELCI2	---	---	15-30	---
Torrey quailbush	ATTO	2-10	2-10	2-5	2-10
fourwing saltbush	ATCA2	5-15	5-15	10-20	5-15
mesquite	PROSO	---	---	10-20	---
rabbitbrush	CHRY89	---	---	2-5	---
rubber rabbitbrush	CHNA2	2-5	2-5	---	2-5
shadscale	ATCO	15-25	15-25	---	15-25
spinescale saltbush	ATSP	10-20	10-20	---	10-20
wolfberry	LYCIU	2-5	2-5	---	2-5

Range site number	030XA062NV	030XA062NV	030XA064NV	030XA062NV
Potential production (lb/acre):				
Favorable years	700	700	2500	700
Normal years	500	500	1500	500
Unfavorable years	200	200	800	200

4010--TANAZZA-WECECH-WODAVAR ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		TANAZZA	WECECH	WODAVAR	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	2-5	2-8	2-8	2-5	2-8	2-15
big galleta	HIRI	5-10	2-8	---	---	---	---
desert needlegrass	STSP3	---	---	---	2-5	5-10	---
Cooper wolfberry	LYCO2	---	---	2-5	---	---	---
bladdersage	SAME	2-5	---	---	---	---	---
catclaw	ACGR	---	---	---	---	---	1-10
creosotebush	LATR2	---	5-10	10-20	25-35	---	---
ephedra	EPHED	2-5	5-10	---	---	---	---
fourwing saltbush	ATCA2	---	---	---	---	---	25-40
mesquite	PROSO	5-15	---	---	---	---	25-45
range ratany	KRPA	---	2-5	---	---	---	---
shadscale	ATCO	10-25	---	15-25	40-50	30-50	---
spiny menodora	MESP2	---	T-5	---	---	---	---
white burrobrush	HYSA	---	---	---	---	2-5	---
white bursage	AMDU2	10-20	20-30	30-40	---	---	---
winterfat	EULA5	---	10-20	---	---	---	---
wolfberry	LYCIU	---	---	---	---	2-5	---

Range site number	030XY049NV	030XB102NV	030XA066NV	030XA053NV	030XA050NV	030XY045NV
Potential production (lb/acre):						
Favorable years	250	500	350	200	200	1500
Normal years	100	350	200	100	100	900
Unfavorable years	50	200	100	50	50	500

4030--WECECH-NOPAH-YERMO ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions				
		Soil name or Inclusion number--				
		WECECH	NOPAH	YERMO	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	T-5	2-5	T-5	1-5	T-5
big galleta	HIRI	---	---	---	2-5	---
desert needlegrass	STSP3	---	2-5	---	---	---
creosotebush	LATR2	50-70	25-35	50-70	20-40	50-70
desert pepperweed	LEFR2	2-10	---	2-10	---	2-10
rabbitbrush	CHRY89	---	---	---	2-5	---
shadscale	ATCO	---	40-50	---	---	---
white burrobrush	HYSA	---	---	---	3-5	---
white bursage	AMDU2	2-8	---	2-8	5-15	2-8

Range site number	030XA073NV	030XA053NV	030XA073NV	030XB038NV	030XA073NV
Potential production (lb/acre):					
Favorable years	200	200	200	250	200
Normal years	100	100	100	150	100
Unfavorable years	50	50	50	50	50

4060--BESHERM-TANAZZA ASSOCIATION

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		BESHERM	TANAZZA	Inclusion 1	Inclusion 2
Indian ricegrass	ORHY	1-5	1-5	2-5	1-5
alkali sacaton	SPAI	---	---	30-50	---
basin wildrye	ELCI2	---	---	15-30	---
big galleta	HIRI	---	2-5	---	---
Torrey quailbush	ATTO	2-10	---	2-5	2-10
creosotebush	LATR2	---	20-40	---	---
fourwing saltbush	ATCA2	5-15	---	10-20	5-15
mesquite	PROSO	---	---	10-20	---
rabbitbrush	CHRY59	---	2-5	2-5	---
rubber rabbitbrush	CHNA2	2-5	---	---	2-5
shadscale	ATCO	15-25	---	---	15-25
spinescale saltbush	ATSP	10-20	---	---	10-20
white burrobrush	HYSA	---	3-5	---	---
white bursage	AMDU2	---	5-15	---	---
wolfberry	LYCIU	2-5	---	---	2-5
Range site number		030XA062NV	030XB038NV	030XA064NV	030XA062NV
Potential production (lb/acre):					
Favorable years		700	250	2500	700
Normal years		500	150	1500	500
Unfavorable years		200	50	800	200

4070--GYNELLE-KAWICH-CIRAC COMPLEX, 0 TO 30 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions					
		Soil name or Inclusion number--					
		GYNELLE	KAWICH	CIRAC	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	10-15	20-30	---	---	1-5	2-8
big galleta	HIRI	---	---	---	5-10	---	5-10
black grama	BOER4	---	---	---	---	---	10-20
bush muhly	MUPO2	---	---	---	1-5	---	---
desert needlegrass	STSP3	---	---	---	---	---	2-8
galleta	HIJA	2-8	---	---	---	---	T-5
inland saltgrass	DISPS2	---	2-5	2-10	---	---	---
California bearpoppy	ARCA4	---	---	---	---	2-8	---
Bailey greasewood	SAVEB	5-15	---	---	---	---	---
Nevada ephedra	EPNE	2-8	---	---	1-5	---	2-5
baccharis	BACCH	---	---	---	5-15	---	---
black greasewood	SAVE4	---	30-50	60-70	---	---	---
blackbrush	CORA	---	---	---	---	---	40-60
bud sagebrush	ARSP5	2-5	---	---	---	---	---
bursage	FRANS*	---	---	---	5-20	---	---
creosotebush	LATR2	---	---	---	5-20	---	---
desertholly	ATHY	---	---	---	---	20-45	---
erigonum	ERIOG	---	---	---	1-5	---	---
fourwing saltbush	ATCA2	---	2-5	---	---	---	---
seepweed	SUAED	---	---	2-8	---	10-20	---
shadscale	ATCO	5-15	2-5	2-10	---	---	---
spiny menodora	MESP2	35-45	---	---	---	---	---
white burrobrush	HYSA	---	---	---	2-5	---	---
wolfberry	LYCIU	---	---	---	---	5-15	---
Range site number		029XY036NV	027XY016NV	027XY025NV	030XB028NV	030XA060NV	030XB014NV
Potential production (lb/acre):							
Favorable years		400	500	500	500	100	700
Normal years		300	300	350	350	50	500
Unfavorable years		100	150	200	200	25	250

4071--CORBILT GRAVELLY LOAMY FINE SAND, 0 TO 4 PERCENT SLOPES

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		CORBILT	Inclusion 1	Inclusion 2	Inclusion 3
Indian ricegrass	ORHY	10-20	2-5	10-20	2-15
big galleta	HIRI	5-15	---	20-40	---
sand dropseed	SPCR	2-5	---	2-5	---
Nevada ephedra	EPNE	---	---	2-5	---
catclaw	ACGR	---	---	---	1-10
cattle saltbush	ATPO	---	25-45	---	---
creosotebush	LATR2	10-20	5-15	---	---
fourwing saltbush	ATCA2	---	---	---	25-40
mesquite	PROSO	---	---	---	25-45
range ratany	KRPA	---	---	2-5	---
ratany	KRAME	1-5	---	---	---
white bursage	AMDU2	20-30	10-20	5-15	---
winterfat	EULA5	---	---	2-5	---
Range site number		030XB037NV	030XY046NV	030XB004NV	030XY045NV
Potential production (lb/acre):					
Favorable years		450	450	1100	1500
Normal years		250	300	800	900
Unfavorable years		100	100	500	500

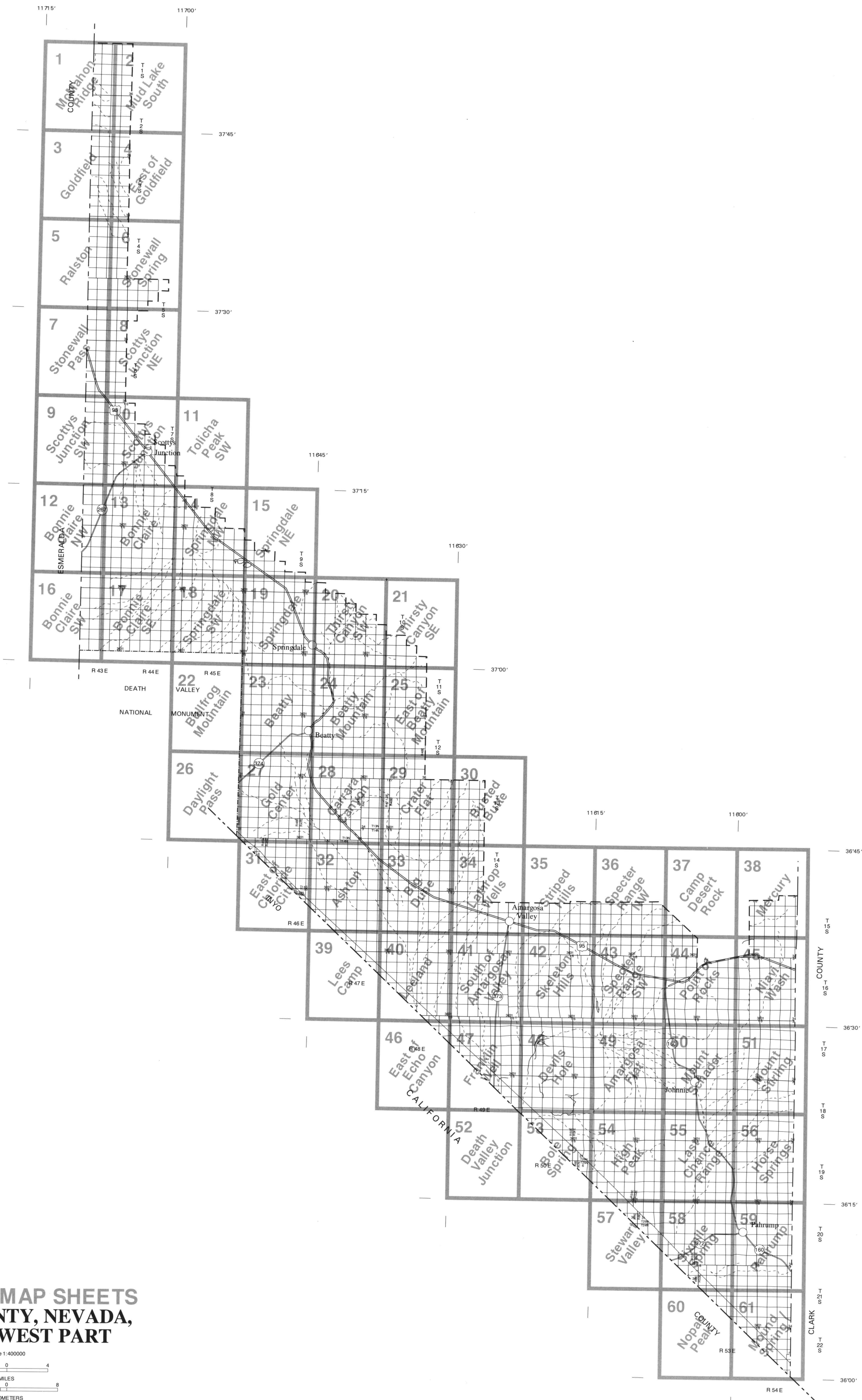
4080--WATER

(Absence of an entry indicates that the named plant is not a key species in the potential native plant community)

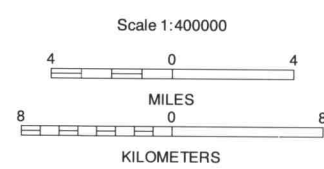
Common plant name	Plant symbol	Percentage composition and production (dry weight) of plants on major soils and inclusions			
		Soil name or Inclusion number--			
		WATER			
Range site number		none			
Potential production (lb/acre):					
Favorable years					
Normal years					
Unfavorable years					

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INDEX TO MAP SHEETS NYE COUNTY, NEVADA, SOUTHWEST PART



SECTIONALIZED TOWNSHIP					
6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

SOIL LEGEND

Map symbols consist of four digit numbers. The map symbols are non-connotative.

SYMBOL	NAME
1314	Weiser-Wechsch association
1315	Lastchance-Commski association
1316	Lastchance-Ferrogold-Commski association
1317	Commski-Lastchance association
1320	Boxspring-Zeheme-Rock outcrop association
1321	Boxspring-Seralin-Rock outcrop association
1340	Longjim-Niavi association
1871	Irongold-Weiser association
2002	Rock outcrop-Upspring-Rubble land complex, 8 to 75 percent slopes
2004	Rock outcrop-Zyplar association
2005	Rock outcrop-St. Thomas association
2010	Longjim gravelly fine sandy loam, 4 to 15 percent slopes
2011	Sanwell, warm-Sanwell complex, 0 to 4 percent slopes
2012	Zalda-Greyeagle-Upspring association
2013	Longjim-Yurm association
2020	Weiser-Canoto association
2021	Weiser-Nickel association
2023	Commski-Sezna association
2030	Corbilt gravelly fine sandy loam, warm, 2 to 4 percent slopes
2031	Corbilt-Skelon association
2040	Yurm-Canoto association
2050	Canoto-Naye association
2051	Yermo-Woda-Nowoy association
2052	Canoto very gravelly sandy loam, 2 to 4 percent slopes
2053	Yermo-Greyeagle-Arizo association
2054	Yermo, hot-Arizo association
2055	Canoto association
2057	Yermo-Commski association
2058	Canoto-Nickel association
2060	Purob-Irongold association
2061	Vace gravelly sandy loam, 4 to 30 percent slopes
2062	Purob-Canoto association
2064	Longjim-Purob-Niavi association
2070	Shamock gravelly fine sandy loam, 2 to 4 percent slopes
2071	Shamock-Skelon association
2080	St. Thomas-Rock outcrop-Commski association
2081	St. Thomas-Tecopa-Rock outcrop complex, 15 to 75 percent slopes
2090	Breko-Veet association
2110	Pahrump fine sandy loam, 4 to 15 percent slopes
2121	Commski-Arizo association
2131	Upspring-Shorim-Rock outcrop association
2140	Jonnic-Canoto association
2151	Arizo-Bluepoint-Dune land complex, 0 to 4 percent slopes
2152	Arizo very gravelly sandy loam, moist, 0 to 2 percent slopes
2153	Arizo-Corbilt-Commski association
2161	Casaga-Nowoy complex, 2 to 4 percent slopes
2162	Casaga-Panor-Yermo association
2171	Sanwell-Skelon complex, 2 to 8 percent slopes
2172	Sanwell-Yermo association
2181	Skelon-Yermo-Pinez complex, 0 to 4 percent slopes
2184	Skelon-Bullfor association
2185	Skelon-Yermo-Ashmed complex, 4 to 15 percent slopes
2186	Yermo-Skelon-Pinez complex, 4 to 15 percent slopes
2191	Pinez-Lealandic-Arizo association
2201	Corbilt-Arizo complex, 2 to 4 percent slopes
2202	Corbilt-Migern-Arizo association73
2204	Corbilt-Wodavar-Sanwell association
2212	Yermo-Bullfor association
2214	Yermo-Arizo association
2215	Yermo-Greyeagle association
2216	Yermo-Arizo complex, 2 to 4 percent slopes
2218	Sanwell-Commski association
2220	Canoto-Arizo complex, 2 to 4 percent slopes

SYMBOL	NAME
2221	Sanwell-Greyeagle association
2222	Niavi-Jonnic association
2230	Yermo-Skelon association
2233	Yermo-Skelon-Bluepoint association
2250	Tokoper-Upspring-Rock outcrop association
2251	Tokoper-Downeyville-Pintwater association
2252	Tokoper-Blacktop association
2253	Tokoper-Ardivey association
2254	Tokoper-Downeyville-Espint association
2260	Greyeagle very gravelly sandy loam, 2 to 8 percent slopes
2261	Longjim-Yermo-Dedas association
2263	Greyeagle-Sanwell-Yermo association
2266	Greyeagle very gravelly sandy loam, 15 to 50 percent slopes
2267	Greyeagle-Skelon association
2268	Greyeagle-Arizo association
2269	Greyeagle-Yermo-Strozi association
2270	Bluepoint loamy fine sand, warm, 4 to 30 percent slopes
2271	Kawich-Corbilt-Wanomie complex, 0 to 2 percent slopes
2280	Shorim-Zalda-Upspring association
2391	Commski-Ashmed complex, 4 to 50 percent slopes
2392	Commski-Ashmed association
2393	Commski-Yermo association
2400	Mobl-Scottcas association
2401	Skelon-Bacho association
2421	Orwash-Wilst-Agon complex
2422	Orwash-Louderback-Arizo complex, 2 to 4 percent slopes
2423	Orwash-Greyeagle-Wanomie association
2425	Orwash-Yermo-Arizo association
2431	Zibate-Zyplar-Dedas association
2432	Zibate very gravelly sandy loam, 8 to 15 percent slopes
2434	Zibate-Sed-Rock outcrop association
2436	Zibate-Rock outcrop complex, 15 to 50 percent slopes
2437	Cruzspring-Rock outcrop complex, 15 to 50 percent slopes
2441	Lewdlac-Sanwell association
2451	Sanwell-Sanwell, warm-Yermo association
2461	Nowoy-Skelon association
2471	Lewdlac-Yermo association
2481	Bacho-Greyeagle association
2482	Bacho-Yermo association
2491	Downeyville-Blacktop-Tokoper association
2492	Downeyville-Silverbow-Rock outcrop association
2493	Downeyville-Tognoni-Stonell association
2494	Downeyville-Vindicator-Stewval association
2495	Downeyville-Gabbvally association
2496	Downeyville-Pintwater-Upspring association
2500	Commski-Greyeagle association
2501	Wanomie-Corbilt association
2510	Fuegosta-Tomel-Izo association
2511	Fuegosta-Wardenot-Izo association
2520	Vigus-Fuegosta-Izo association
2521	Vigus-Wardenot-Fuegosta association
2531	Laxal-Stonell-Unsel association
2532	Laxal-Fang association
2540	Lidan-Izo association
2550	Stonewall-Izo-Lidan association
2570	Stargo-Playas association
2580	Wardenot-Izo association
2601	Cobatus-Kawich complex, 0 to 2 percent slopes
2611	Corbilt very gravelly sandy loam, 0 to 8 percent slopes
2630	Wechsch-Commski association
2640	Downeyville-Advokay-Pintwater association
2641	Advokay-Ardivey-Leo association
2642	Advokay-Blacktop association

SYMBOL	NAME
2650	Luning-Wardenot-Izo association
2660	Stonell-Wardenot-Izo association
2670	Ardivey-Izo association
2671	Ardivey-Stonell-Izo association
2680	Espint-Vindicator association
2681	Espint-Stewval-Vindicator association
2682	Espint-Gabbvally-Stewval association
2690	Leo-Izo association
2701	Cobatus loam, drained, 0 to 2 percent slopes
2710	Papoose-Vindicator-Espint association
2720	Unsel-Stonell-Veet association
2730	Gabbvally-Blacktop-Espint association
2731	Gabbvally-Downeyville-Vindicator association
2732	Gabbvally-Tognoni-Downeyville association
2734	Gabbvally-Downeyville association
2735	Gabbvally-Wahguyhe-Rock outcrop association
2736	Gabbvally-Brier-Rock outcrop association
2740	Tognoni-Blacktop association
2741	Blacktop-Downeyville-Tognoni association
2750	Silverbow-Wardenot-Izo association
2760	Downeyville-Unsel-Tokoper association
2770	Bullfor-Panor-Bluepoint association
2781	Haymont-Bluepoint-Panor complex, 0 to 4 percent slopes
2810	Ashmed-Yermo-Arizo association
2820	Strozi-Corbilt association
2840	Armpup-Strozi association
2850	Scottcas-Yermo association
2860	Sezna-Yermo association
2870	Kanackey very gravelly loam, 15 to 50 percent slopes
2880	Bacho-Yermo-Arizo association
2890	Nopah-Woda-Gullied land association
2900	Playas
2901	Playas-Corbilt-Bluepoint association
2903	Playas-Mobl-Kawich complex, 0 to 4 percent slopes
2910	Dune land
2920	Dumps, mine
2930	Seralin-Rock outcrop-Sed association
2940	Schader-Sed-Cruzspring association
2950	Pits, gravel
2951	Pits, clay
2960	Tomel-Ardivey-Wardenot association
2961	Tomel-Breko-Wardenot association
2970	Destazo-Nowoy-Gullied land association
2971	Upspring very gravelly sandy loam, 8 to 15 percent slopes
2990	Lealandic-Ashmed association
3021	Casaga-Destazo-Yurm complex, 2 to 8 percent slopes
3022	Casaga-Woda-Yermo association
3052	Bobnbob-Caslo complex, 0 to 4 percent slopes
3101	Bluepoint-Besherm complex, 2 to 15 percent slopes
3120	Nowoy-Tanazza-Yurm association
3150	Casaga gravelly loam, 2 to 4 percent slopes
3230	Alko-Casaga association
3252	Bobnbob-Cobatus complex, 0 to 2 percent slopes
3302	Rumpah clay
3313	Besherm clay loam
3320	Haymont very fine sandy loam, 0 to 2 percent slopes
3333	Nopah loam
4010	Tanazza-Wechsch-Wodavar association
4030	Wechsch-Nopah-Yermo association
4060	Bersherm-Tanazza association
4070	Gynelle-Kawich-Cirac complex, 0 to 30 percent slopes
4071	Corbilt gravelly loamy fine sand, 0 to 4 percent slopes
4080	Water

CONVENTIONAL AND SPECIAL
SYMBOLS LEGEND

CULTURAL FEATURES		SPECIAL SYMBOLS FOR SOIL SURVEY	
BOUNDARIES		SOIL DELINEATIONS AND SYMBOLS	
National, state, or province		MISCELLANEOUS	
County or parish		Rock outcrop (up to 10 acres) (includes sandstone and shale)	
Reservation (national forest or park, state forest or park, and large airport)			
Limit of soil survey (label)			
Field sheet matchline and neatline			
STATE COORDINATE TICK 1 890 000 FEET			
ROAD EMBLEM & DESIGNATIONS			
Interstate			
Federal			
State			
PITS			
Gravel pit			
Mine or quarry			
MISCELLANEOUS WATER FEATURES			
Spring			



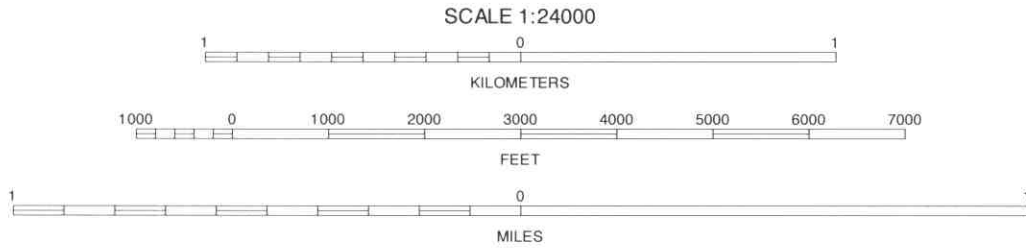


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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



1	2	3	1 MUD LAKE NW
			2 MUD LAKE NORTH
			3 MONITOR PEAK
4		5	4 MCMAHON RIDGE
			5 CACTUS PEAK
			6 GOLDFIELD
6	7	8	7 EAST OF GOLDFIELD
			8 WHITE PATCH DRAW

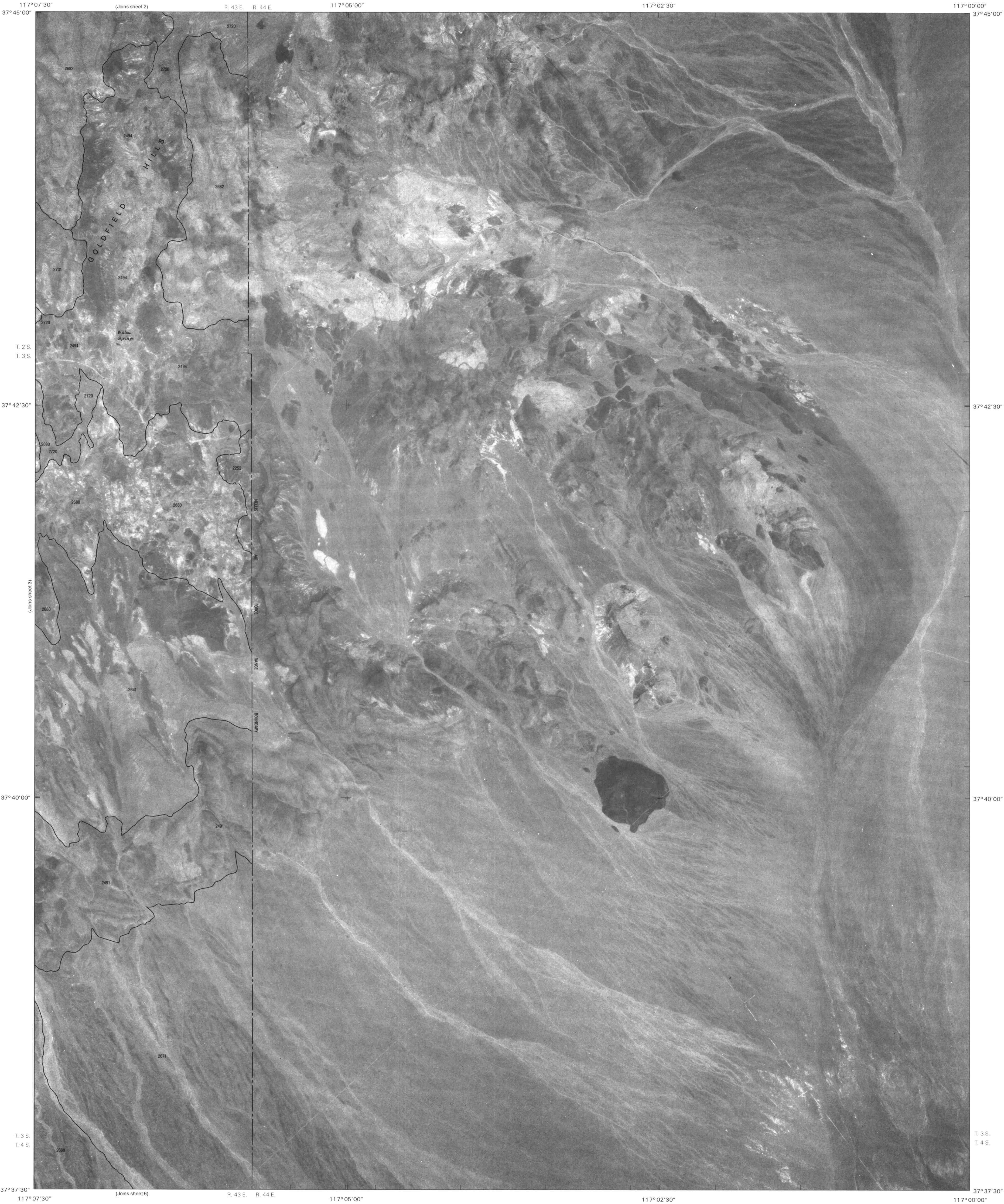
INDEX TO ADJOINING 7.5 MAPS

MUD LAKE SOUTH, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 2 OF 61

1	2	3	1 ALKALI
			2 MCMAHON RIDGE
4		5	3 MUD LAKE SOUTH
			4 MONTEZUMA PEAK
6	7	8	5 EAST OF GOLDFIELD
			6 MONTEZUMA PEAK SE
			7 RALSTON
			8 STONEWALL SPRING

INDEX TO ADJOINING 7.5 MAPS

GOLDFIELD, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 3 OF 61

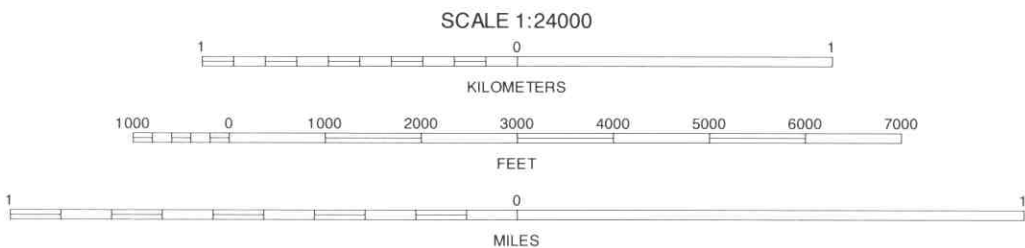


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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION

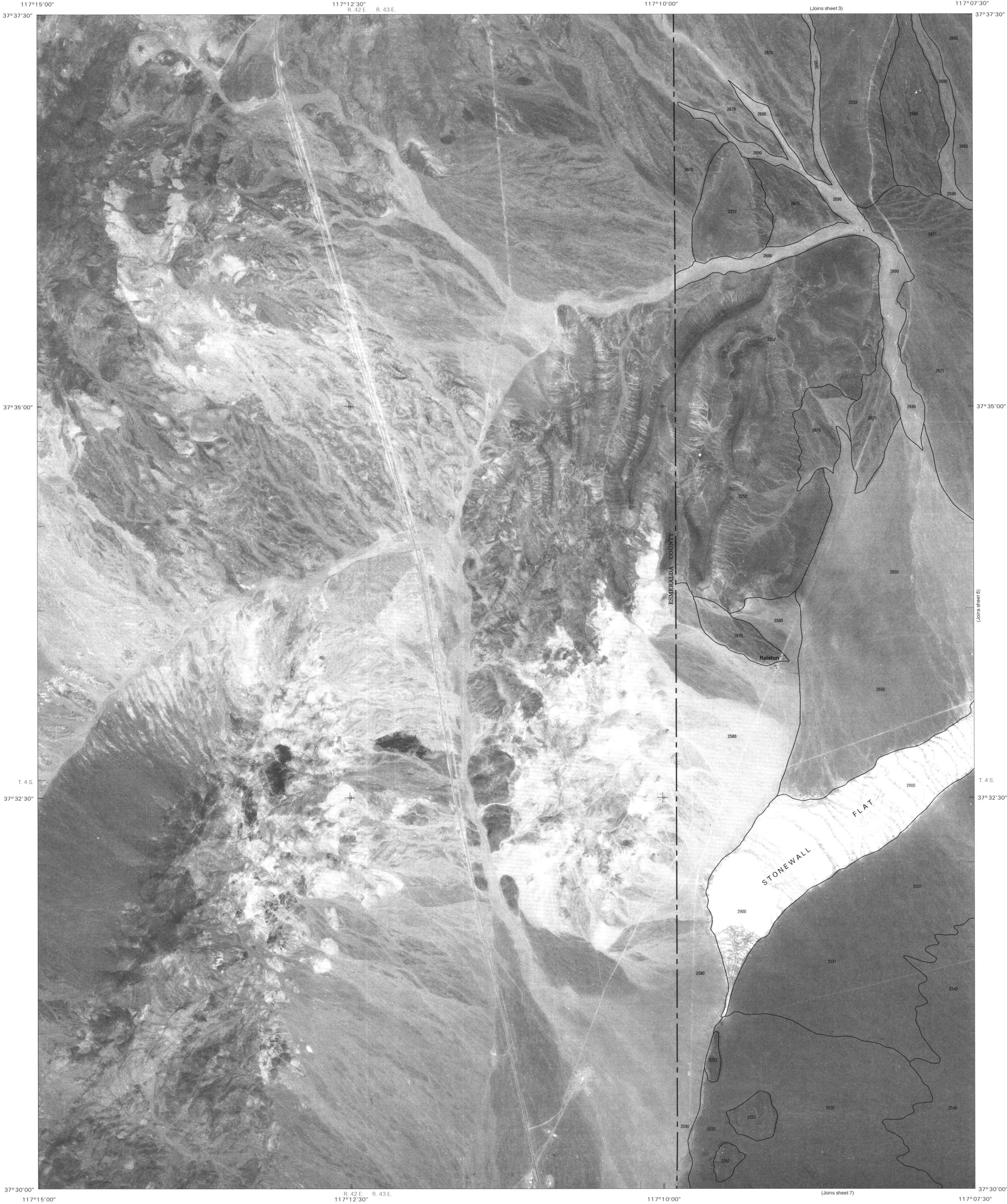


NYE COUNTY, NEVADA, SOUTHWEST PART NO. 4

1	2	3	1 MCMAHON RIDGE
			2 MUD LAKE SOUTH
			3 CACTUS PEAK
4		5	4 GOLDFIELD
			5 WHITE PATCH DRAW
			6 RALSTON
6	7	8	7 STONEWALL SPRING
			8 PACK RAT CANYON

INDEX TO ADJOINING 7.5 MAPS

EAST OF GOLDFIELD, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 4 OF 61



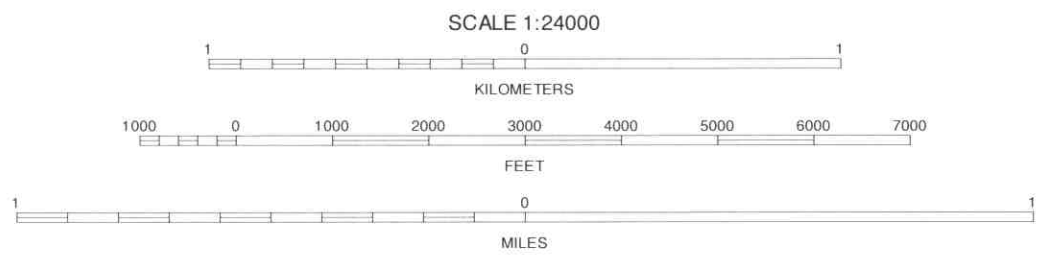
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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

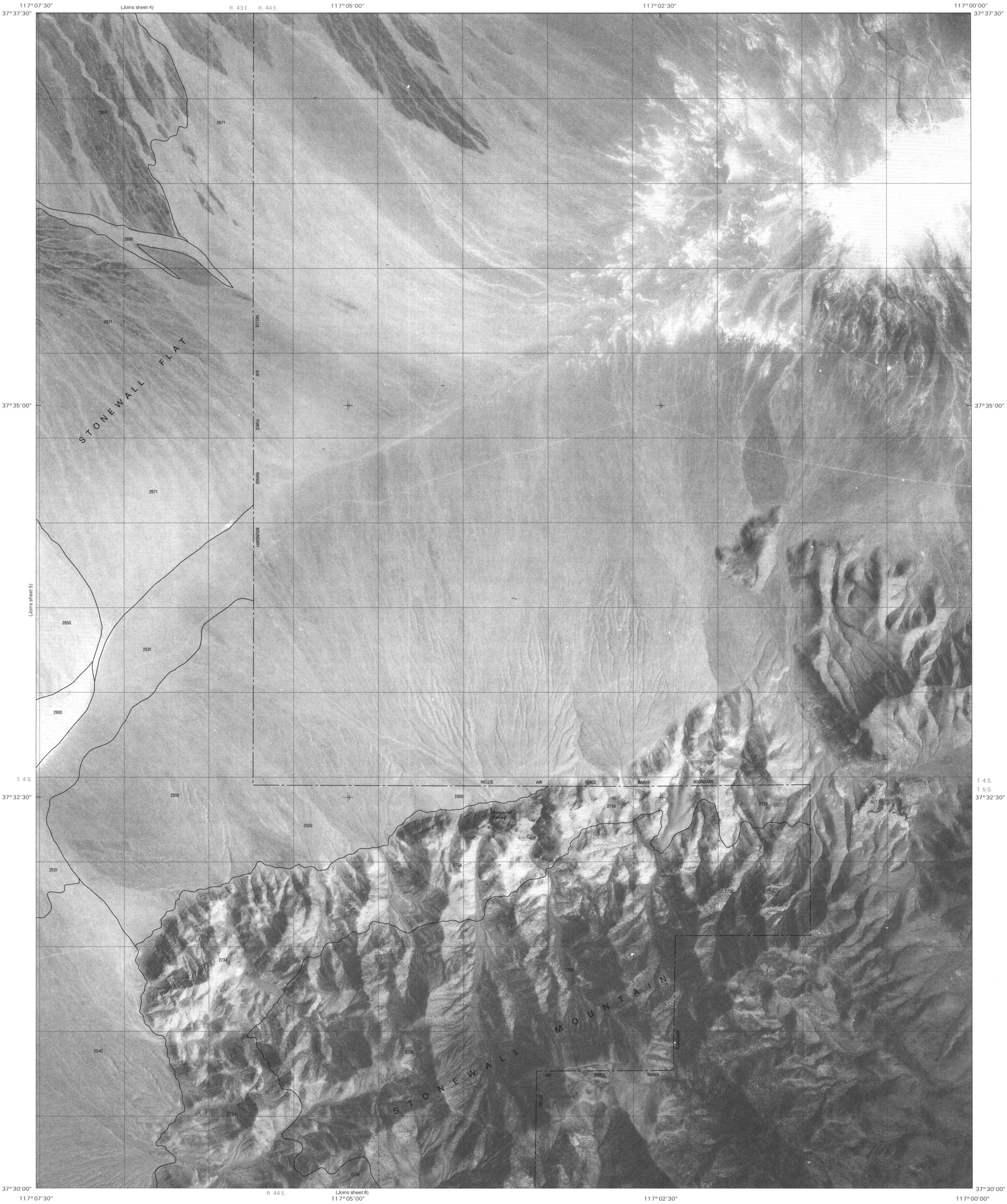


QUADRANGLE LOCATION



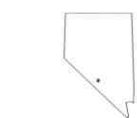
1	2	3	1 MONTEZUMA PEAK
			2 GOLDFIELD
			3 EAST OF GOLDFIELD
4		5	4 MONTEZUMA PEAK SE
			5 STONEWALL SPRING
			6 MOUNT JACKSON
6	7	8	7 STONEWALL PASS
			8 SCOTTYS JUNCTION NE

INDEX TO ADJOINING 7.5 MAPS

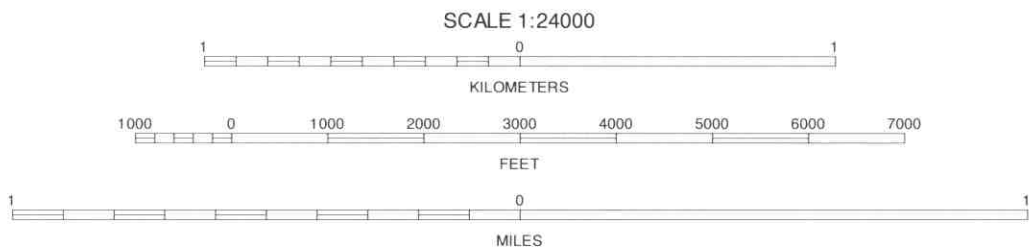


This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



1	2	3	1 GOLDFIELD
			2 EAST OF GOLDFIELD
			3 WHITE PATCH DRAW
4		5	4 RALSTON
			5 PACK RAT CANYON
			6 STONEWALL PASS
6	7	8	7 SCOTTYS JUNCTION NE
			8 TOLICHA PEAK NW

INDEX TO ADJOINING 7.5 MAPS

STONEWALL SPRING, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 6 OF 61



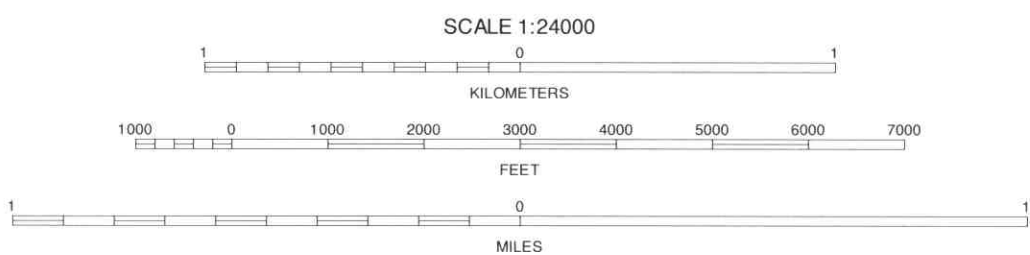


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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



NYE COUNTY, NEVADA, SOUTHWEST PART NO. 8

1	2	3	1 RALSTON
4	5	6	2 STONEWALL SPRING
7	8	9	3 PACK RAT CANYON
10	11	12	4 STONEWALL PASS
13	14	15	5 TOLICHA PEAK NW
16	17	18	6 SCOTTYS JUNCTION SW
19	20	21	7 SCOTTYS JUNCTION
22	23	24	8 TOLICHA PEAK SW

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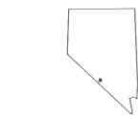
SCOTTYS JUNCTION NE, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 8 OF 61



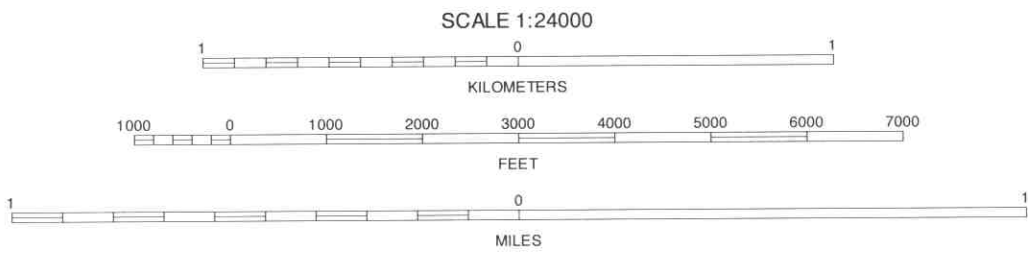
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North American Datum of 1927 (NAD27). Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



NYE COUNTY, NEVADA, SOUTHWEST PART NO. 9

1	2	3	1 MOUNT JACKSON
4	5	2 STONEWALL PASS	
6	7	3 SCOTTYS JUNCTION NE	
		4 GOLD POINT	
		5 SCOTTYS JUNCTION	
		6 GOLD MOUNTAIN	
		7 BONNIE CLAIRE NW	
		8 BONNIE CLAIRE	

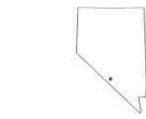
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SCOTTYS JUNCTION SW, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 9 OF 61

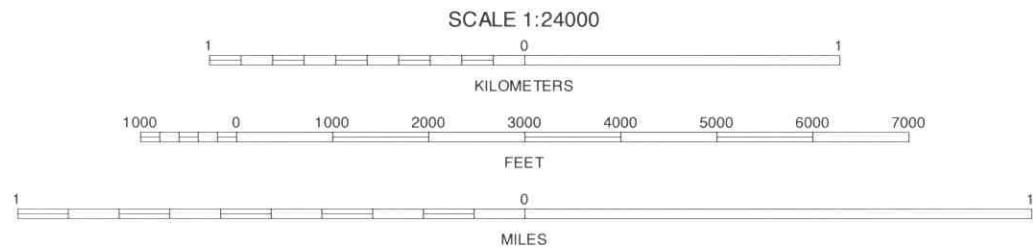


This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

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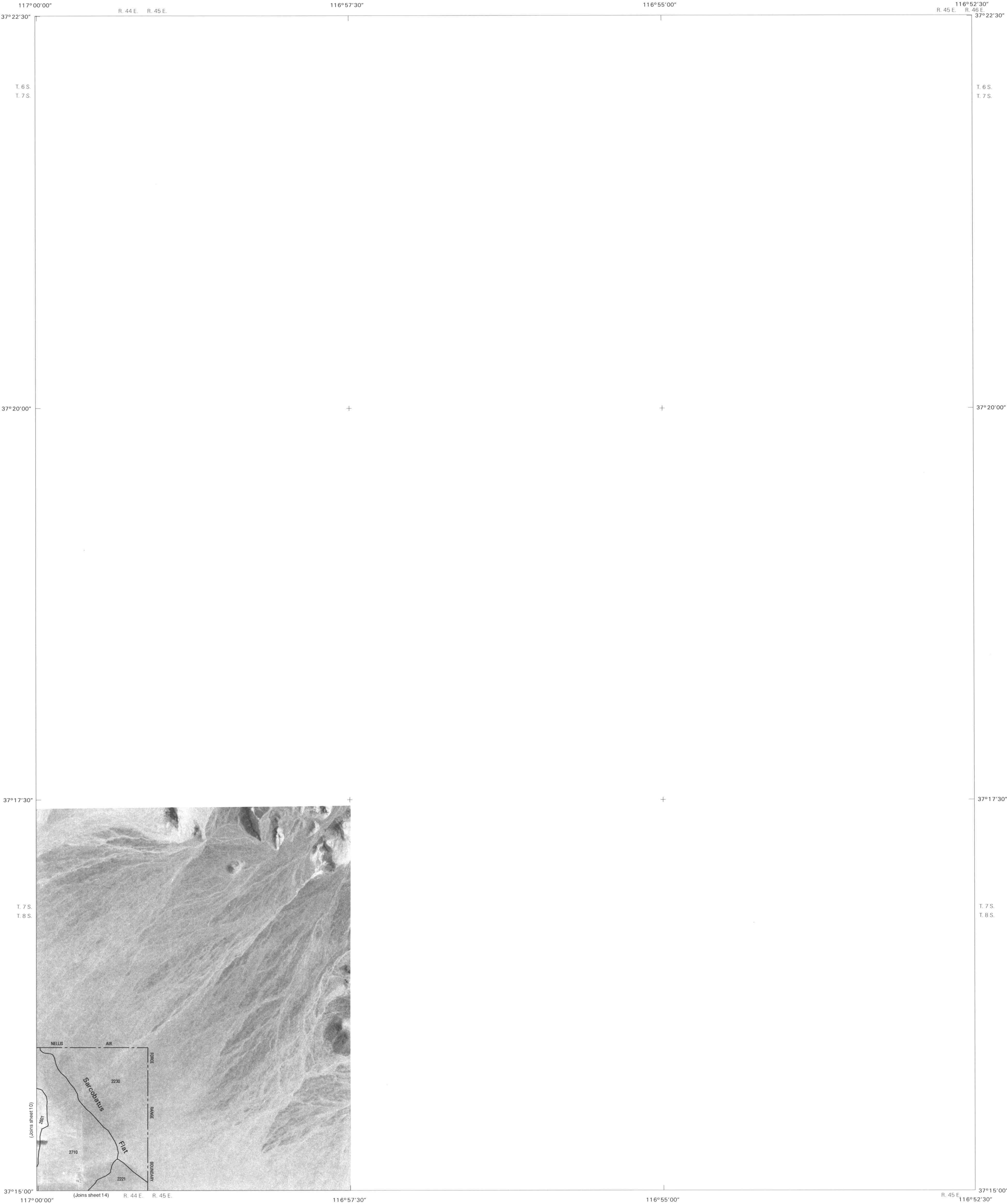


QUADRANGLE LOCATION



1	2	3	1 STONEWALL PASS
4		5	2 SCOTTYS JUNCTION NE
6	7	8	3 TOLICHA PEAK NW
			4 SCOTTYS JUNCTION SW
			5 TOLICHA PEAK SW
			6 BONNIE CLAIRE NW
			7 BONNIE CLAIRE
			8 SPRINGDALE NW

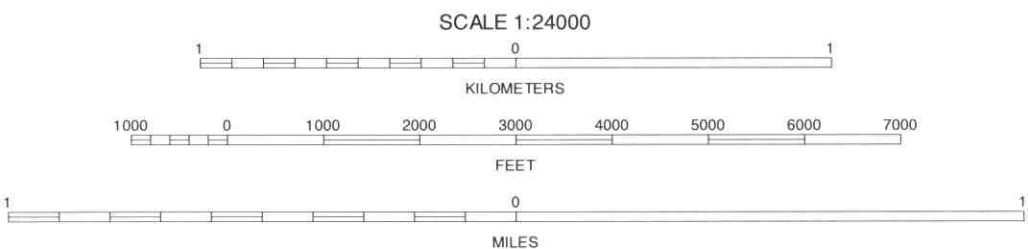
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This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies.



QUADRANGLE LOCATION



1	2	3	1 SCOTTYS JUNCTION NE
			2 TOLICHA PEAK NW
			3 TOLICHA PEAK NE
4		5	4 SCOTTYS JUNCTION
			5 TOLICHA PEAK
			6 BONNIE CLARE
6	7	8	7 SPRINGDALE NW
			8 SPRINGDALE NE

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TOLICHA PEAK SW, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 11 OF 61



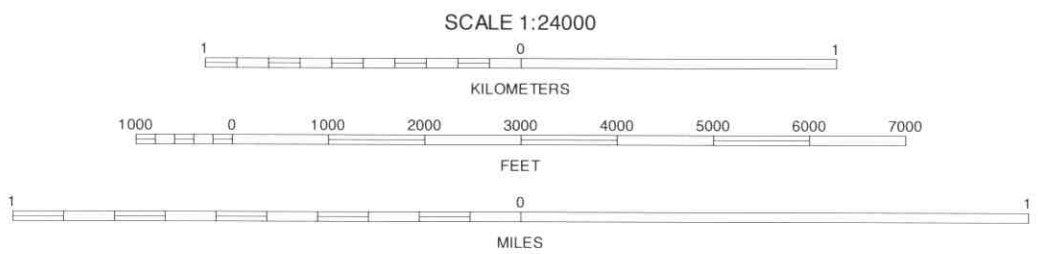
This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



1	2	3
4	5	6
7	8	9

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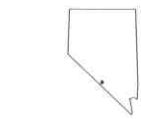
BONNIE CLAIRE NW, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 12 OF 61



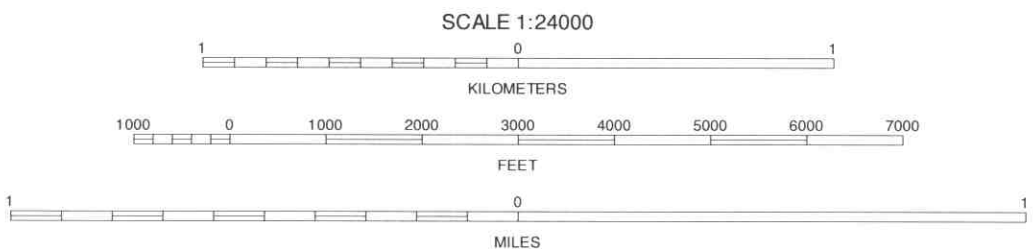
This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION

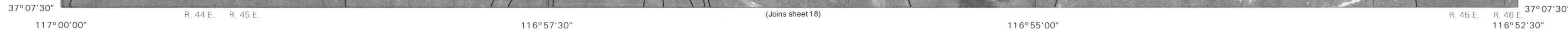


1	2	3	1 SCOTTYS JUNCTION SW
4	5	2 SCOTTYS JUNCTION	3 TOLICHAPEAK SW
6	7	8	4 BONNIE CLAIRE NW
			5 SPRINGDALE NW
			6 BONNIE CLAIRE SW
			7 BONNIE CLAIRE SE
			8 SPRINGDALE SW

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BONNIE CLAIRE, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 13 OF 61

NYE COUNTY, NEVADA, SOUTHWEST PART
 SPRINGDALE NW QUADRANGLE
 SHEET NUMBER 14 OF 61



North American Datum of 1927 (NAD27). Clarke 1866 Spheroid.
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are
approximately positioned. Digital data are available for
this quadrangle.

SCALE 1:24000

KILOMETERS

0 1000 2000 3000 4000 5000 6000 7000

FEET

0 1000 2000 3000 4000 5000 6000 7000

MILES

0 1

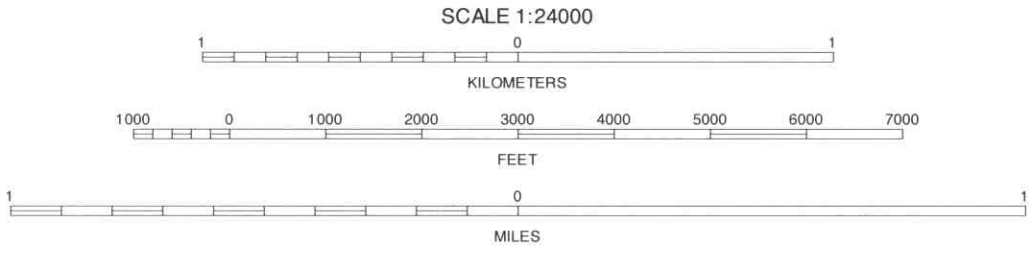
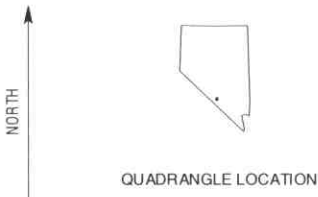
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7.5 MINUTE SERIES
SHEET NUMBER 14 OF 61



This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

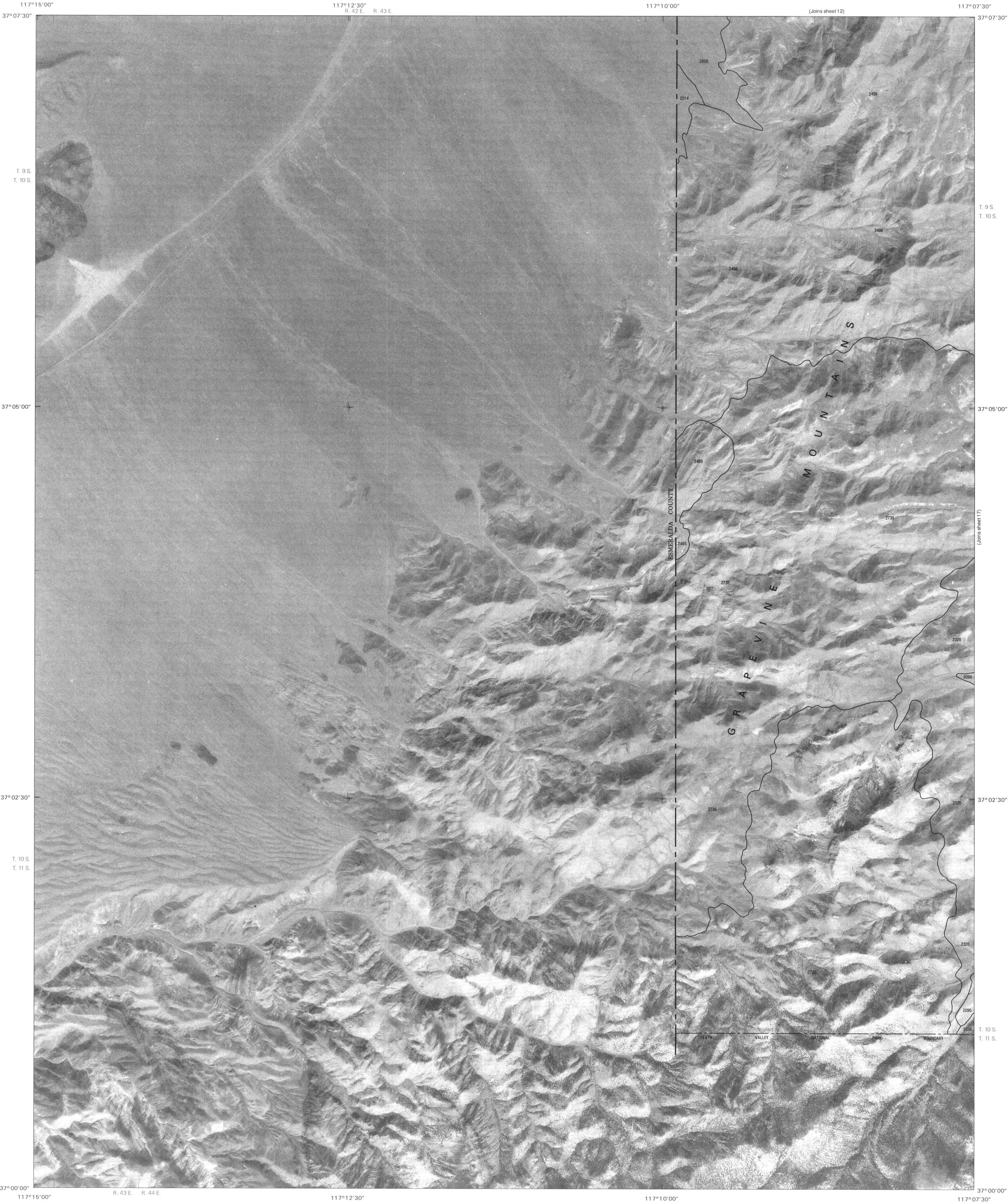
North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1 TOLICHA PEAK SW
			2 TOLICHA PEAK
			3 BLACK MOUNTAIN
4		5	4 SPRINGDALE NW
			5 THIRSTY CANYON NW
			6 SPRINGDALE SW
6	7	8	7 SPRINGDALE
			8 THIRSTY CANYON SW

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SPRINGDALE NE, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 15 OF 61



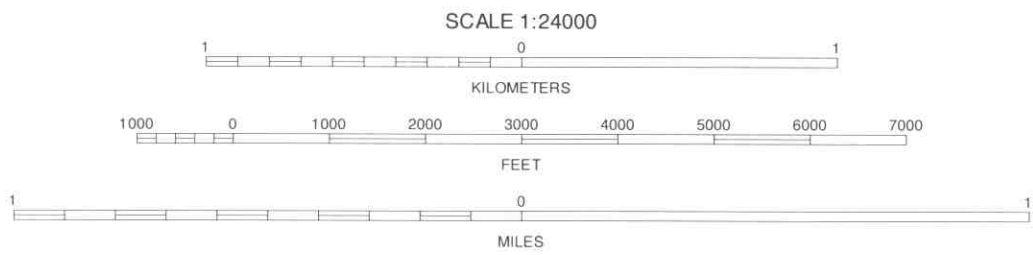
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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

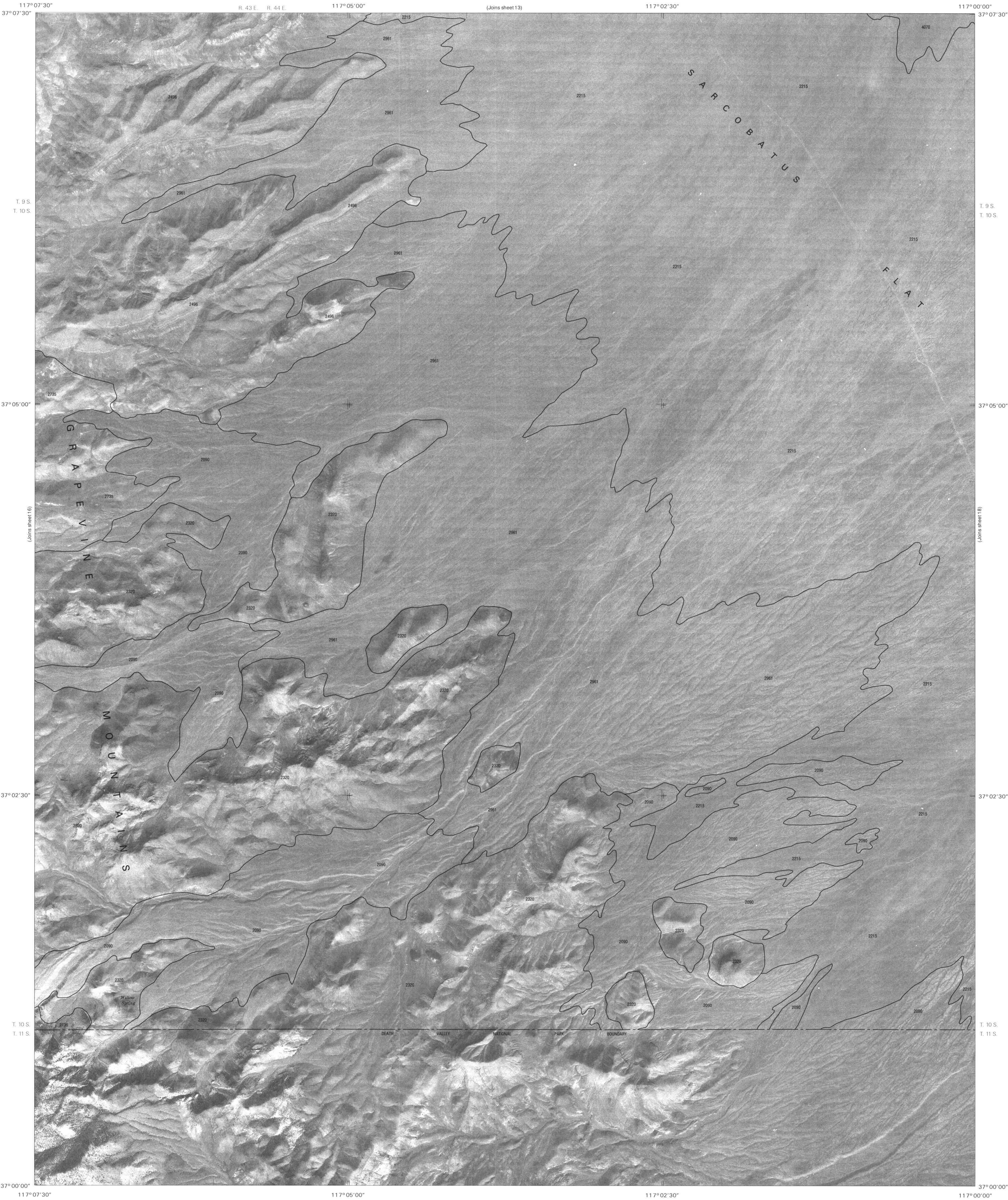


QUADRANGLE LOCATION



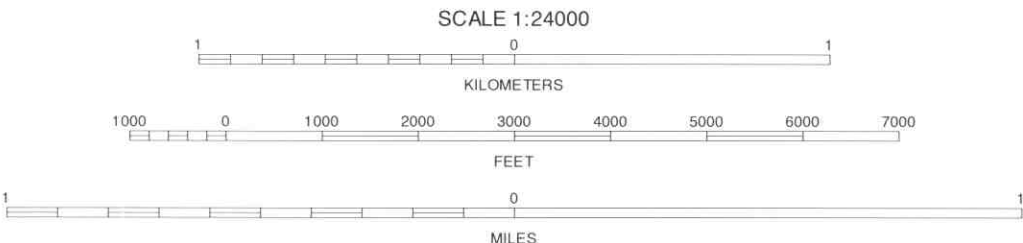
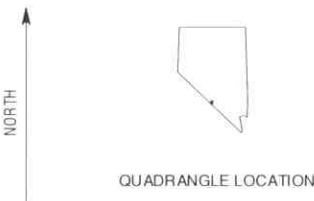
1	2	3	1 GOLD MOUNTAIN
			2 BONNIE CLAIRE NW
			3 BONNIE CLAIRE
4		5	4 SCOTTYS CASTLE
			5 BONNIE CLAIRE SE
			6 EAST OF TIN MOUNTAIN
6	7	8	7 GRAPEVINE PEAK
			8 WAHGUYE PEAK

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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1 BONNIE CLAIRE NW
4	5	2 BONNIE CLAIRE	3 SPRINGDALE NW
6	7	8	4 BONNIE CLAIRE SW
			5 SPRINGDALE SW
			6 GRAPEVINE PEAK
			7 WAHGUYYE PEAK
			8 BULLFROG MOUNTAIN

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BONNIE CLAIRE SE, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 17 OF 61

NYE COUNTY, NEVADA, SOUTHWEST PART
 SPRINGDALE SW QUADRANGLE
 SHEET NUMBER 18 OF 61

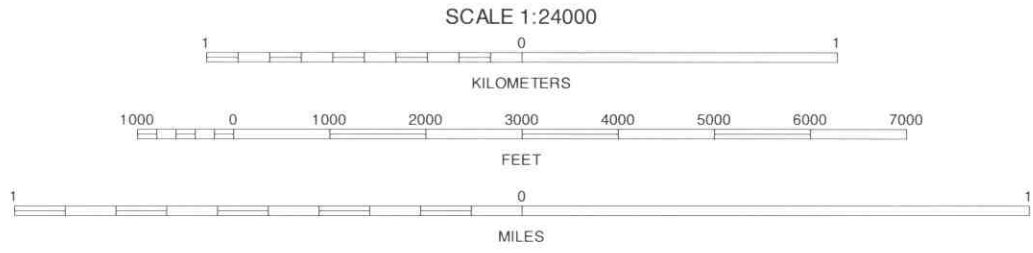
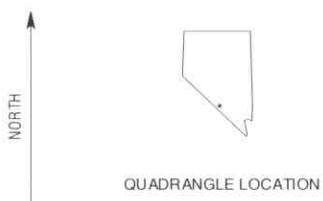


SPRINGDALE SW, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 18 OF 61



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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1 SPRINGDALE NW
4	5	2 SPRINGDALE NE	3 THIRSTY CANYON NW
6	7	4 SPRINGDALE SW	5 THIRSTY CANYON SW
		6 BULLFROG MOUNTAIN	7 BEATTY
		8 BEATTY MOUNTAIN	

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SPRINGDALE, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 19 OF 61

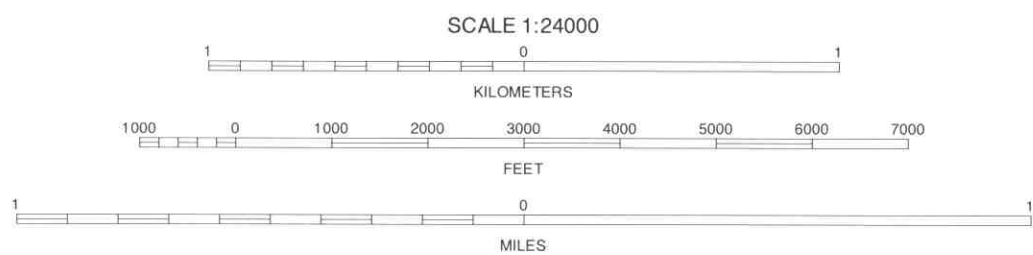


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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



QUADRANGLE LOCATION



1	2	3	1 SPRINGDALE NE
			2 THIRSTY CANYON NW
			3 THIRSTY CANYON
4		5	4 SPRINGDALE
			5 THIRSTY CANYON SE
6	7	8	6 BEATTY
			7 BEATTY MOUNTAIN
			8 EAST OF BEATTY MOUNTAIN

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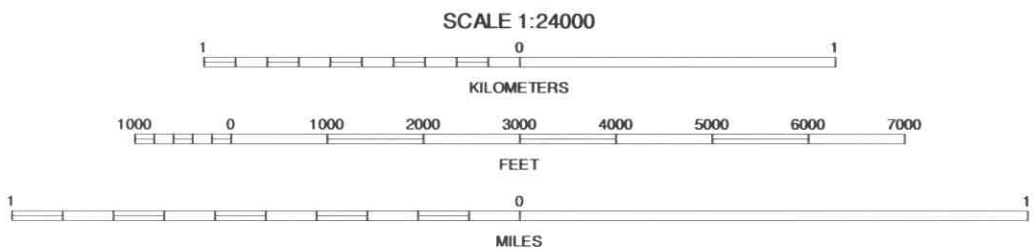


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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

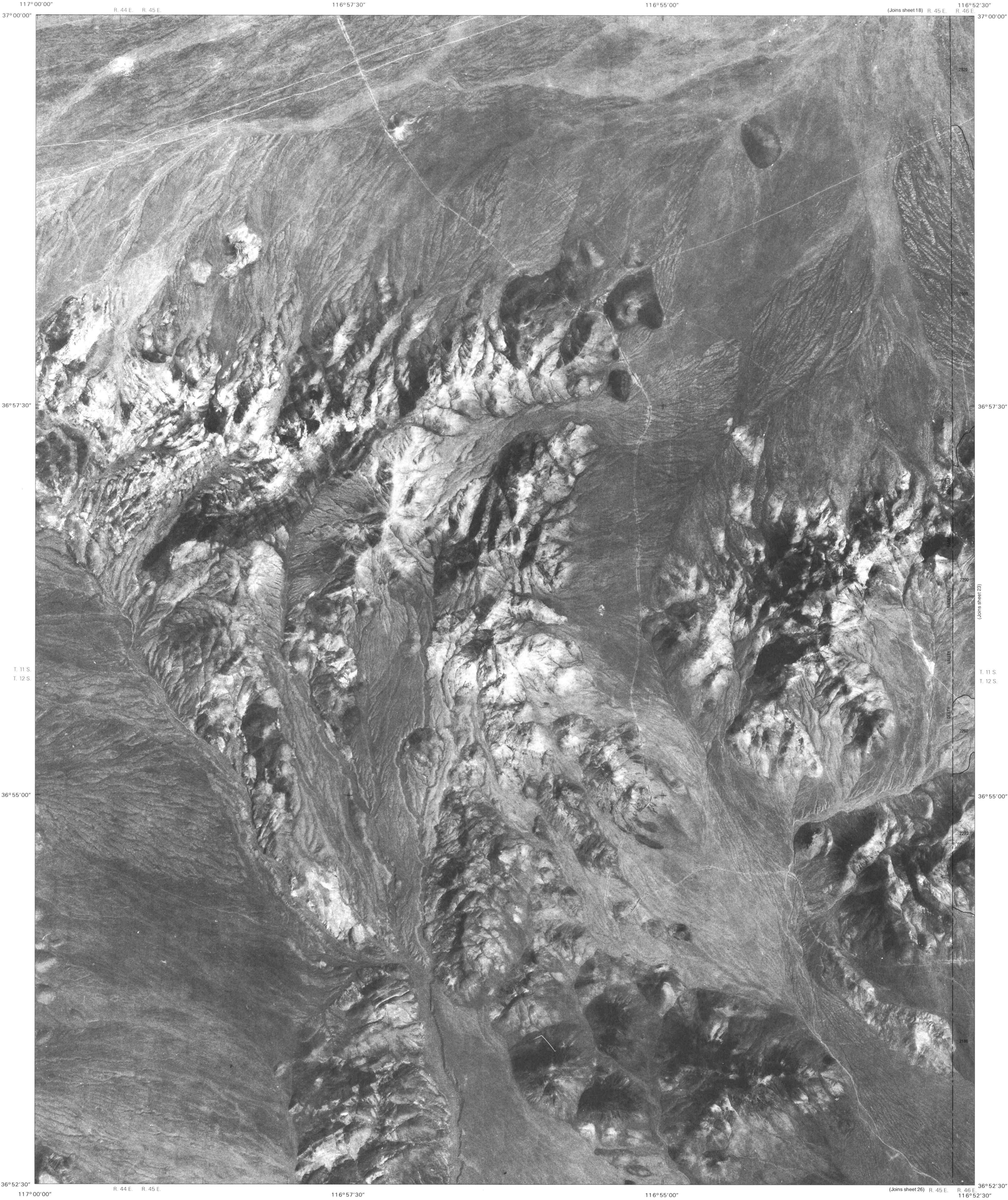


QUADRANGLE LOCATION



1	2	3	1 THIRSTY CANYON NW
4	5	2 THIRSTY CANYON	3 SCRUGHAM PEAK
6	7	8	4 THIRSTY CANYON SW
			5 TIMBER MOUNTAIN
			6 BEATTY MOUNTAIN
			7 EAST OF BEATTY MOUNTAIN
			8 TOPOPAH SPRING NW

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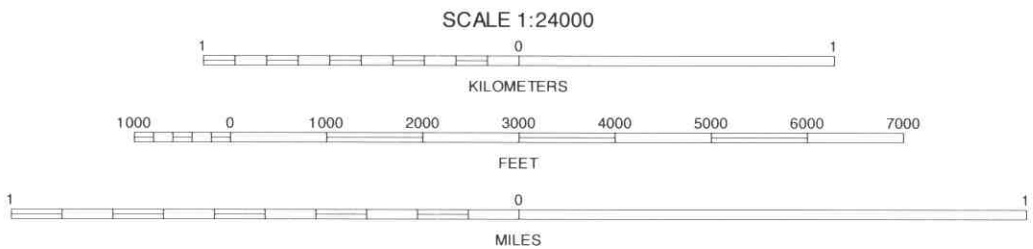
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North American Datum of 1927 (NAD27). Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



1	2	3	1 BONNIE CLAIRE SE
4	5	2 SPRINGDALE SW	3 SPRINGDALE
6	7	4 WAHGUYYE PEAK	5 BEATTY
		6 THIMBLE PEAK	7 DAYLIGHT PASS
		8 GOLD CENTER	

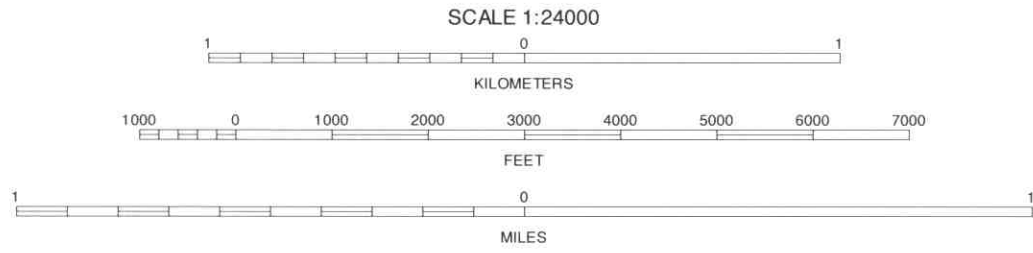
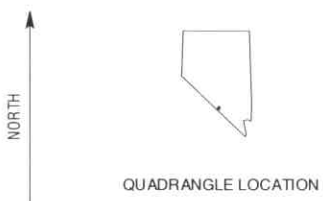
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BULLFROG MOUNTAIN, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 22 OF 61



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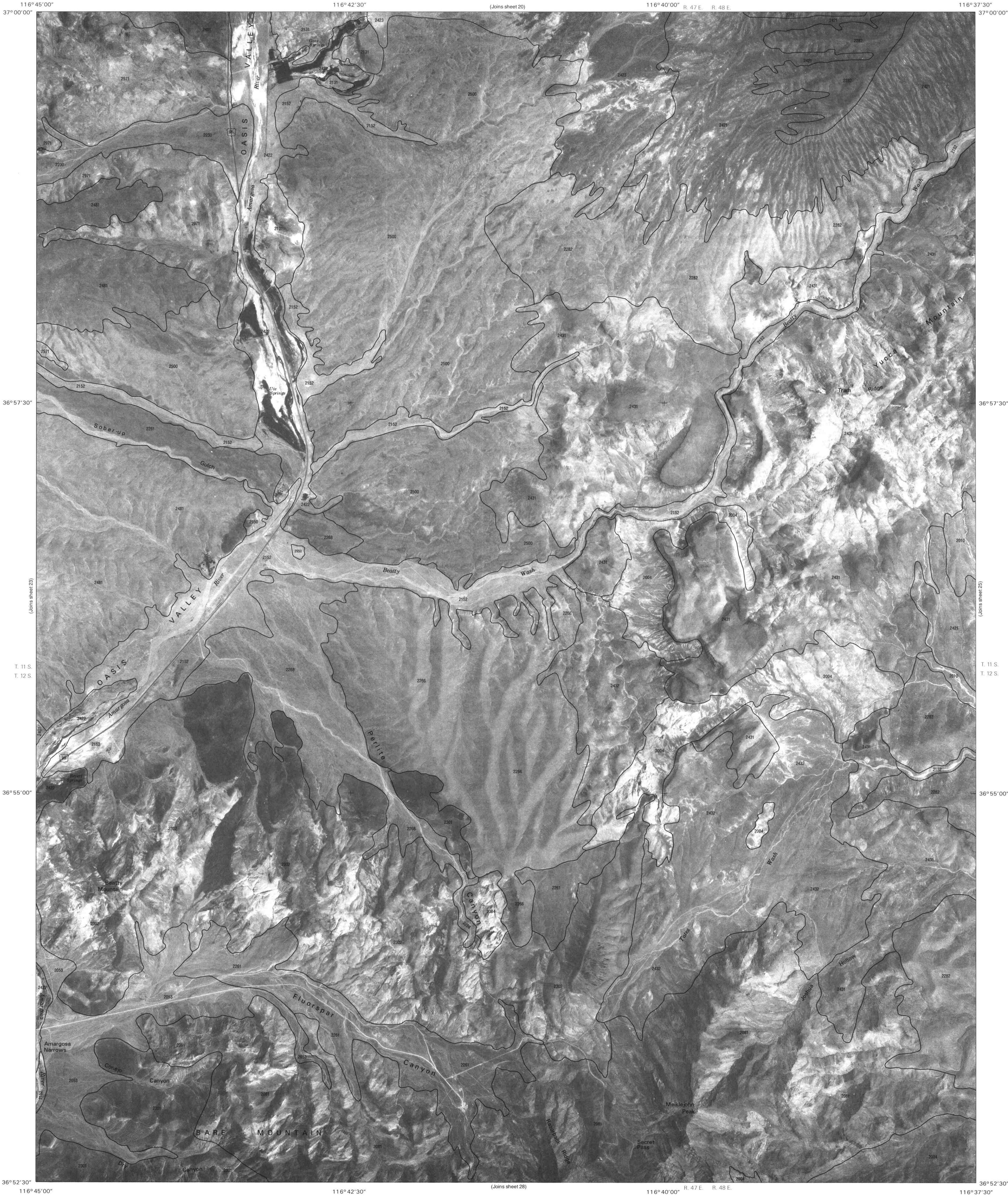
North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3
4	5	6
7	8	9

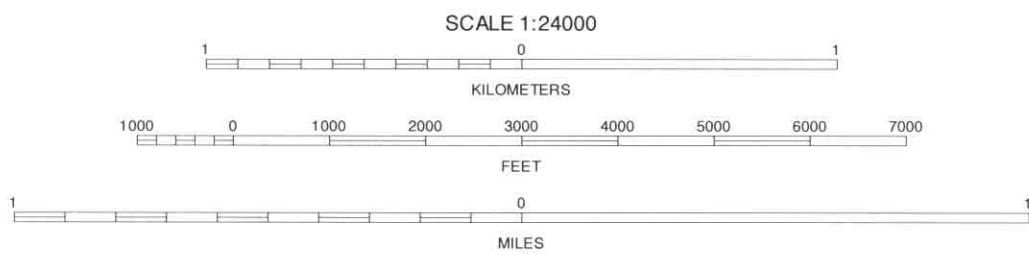
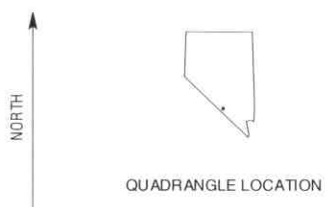
- 1 SPRINGDALE SW
- 2 THIRSTY CANYON SW
- 3 BULLFROG MOUNTAIN
- 4 BEATTY MOUNTAIN
- 5 DAYLIGHT PASS
- 6 GOLD CENTER
- 7 CARRARA CANYON

BEATTY, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 23 OF 61



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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1 SPRINGDALE
4	5	6	2 THIRSTY CANYON SW
7	8	9	3 THIRSTY CANYON SE
			4 BEATTY
			5 EAST OF BEATTY MOUNTAIN
			6 GOLD CENTER
			7 CARRARA CANYON
			8 CRATER FLAT

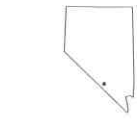
BEATTY MOUNTAIN, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 24 OF 61

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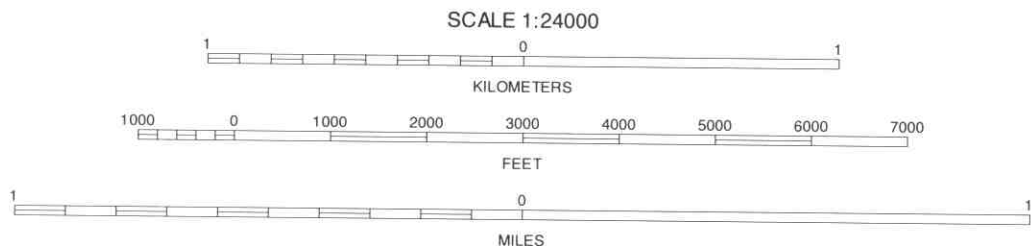


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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



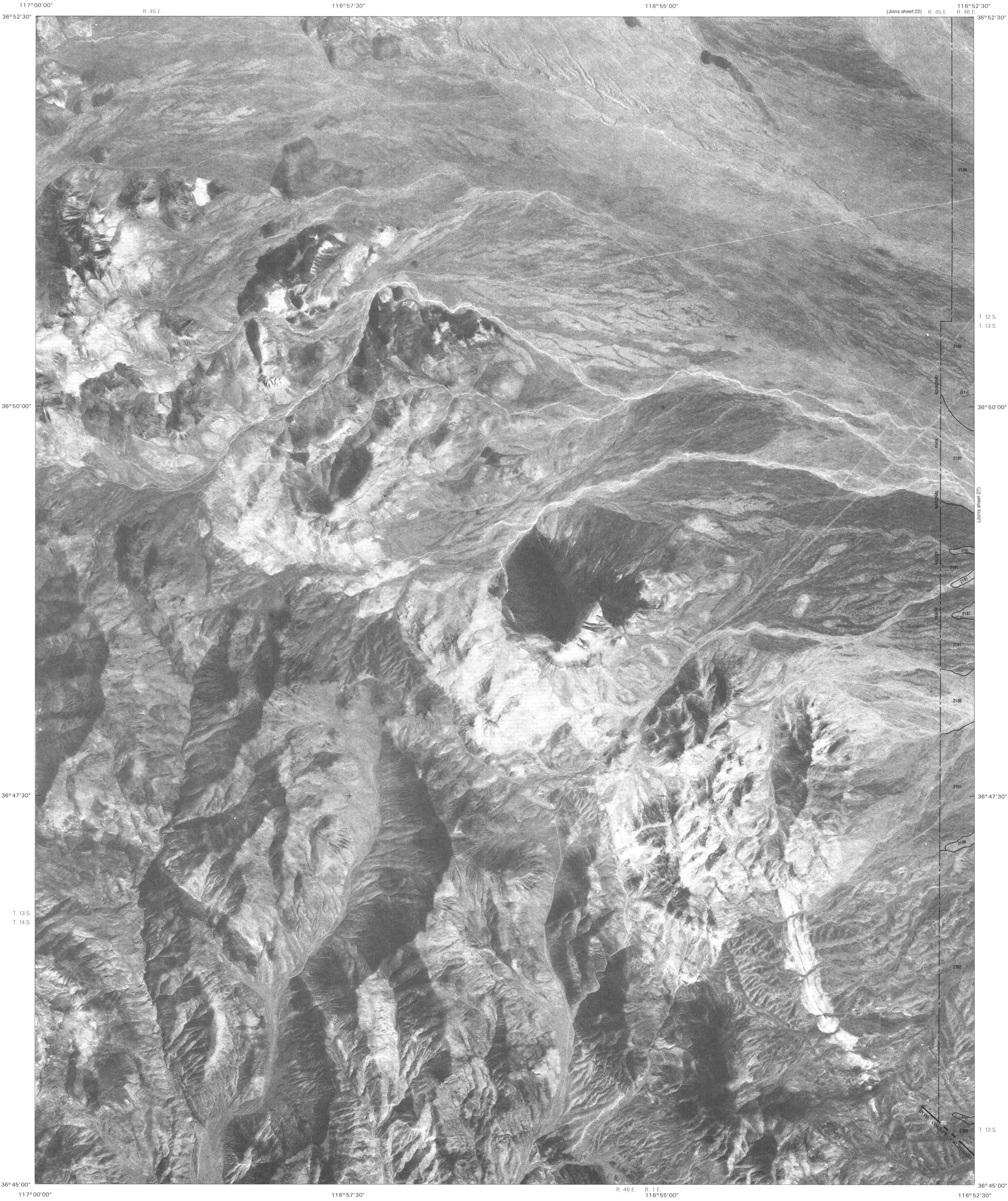
QUADRANGLE LOCATION



1	2	3
4	5	6
7	8	

EAST OF BEATTY MOUNTAIN, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 25 OF 61

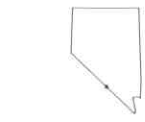
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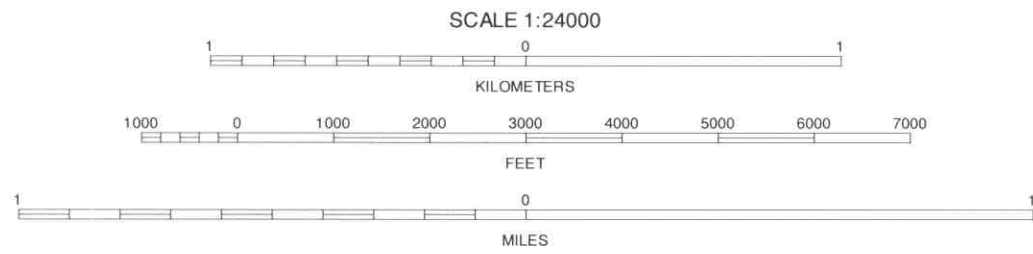
This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



NYE COUNTY, NEVADA, SOUTHWEST PART NO. 26

1	2	3	1. WAHGUYYE PEAK
			2. BULLFROG MOUNTAIN
			3. BEATTY
			4. THIMBLE PEAK
4		5	5. GOLD CENTER
			6. STOVEPIPE WELLS NE
6	7	8	7. CHLORIDE CITY
			8. EAST OF CHLORIDE CITY

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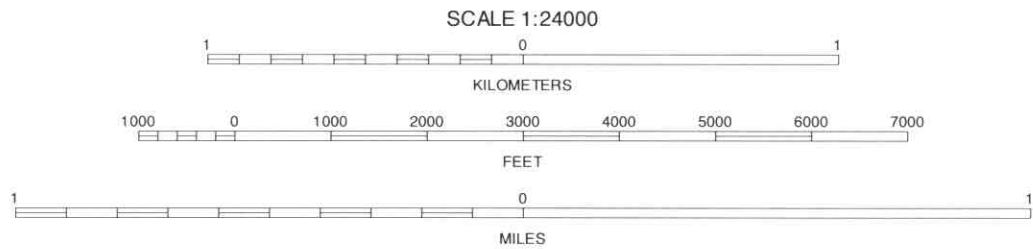
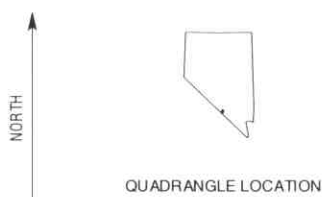
DAYLIGHT PASS, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 26 OF 61





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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1
4	5	6	2
7	8	9	3

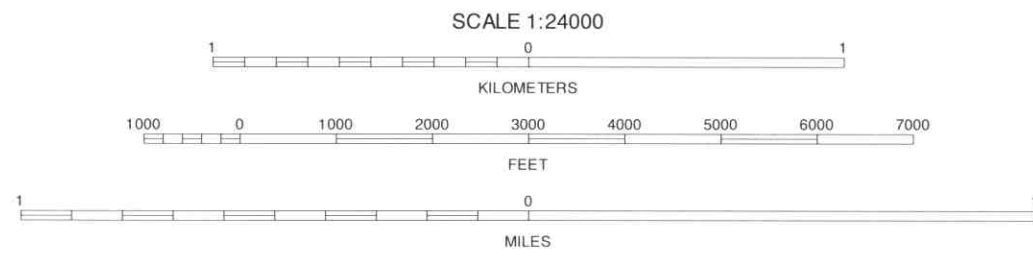
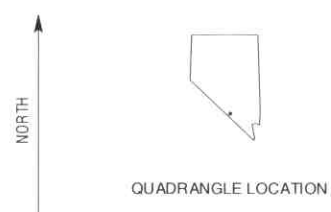
INDEX TO ADJOINING 7.5-MINUTE MAPS

CARRARA CANYON, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 28 OF 61



This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1 BEATTY MOUNTAIN
			2 EAST OF BEATTY MOUNTAIN
			3 TOPOPAH SPRING NW
4		5	4 CARRARA CANYON
			5 BUSTED BUTTE
			6 ASHTON
6	7	8	7 BIG DUNE
			8 AMARGOSA VALLEY

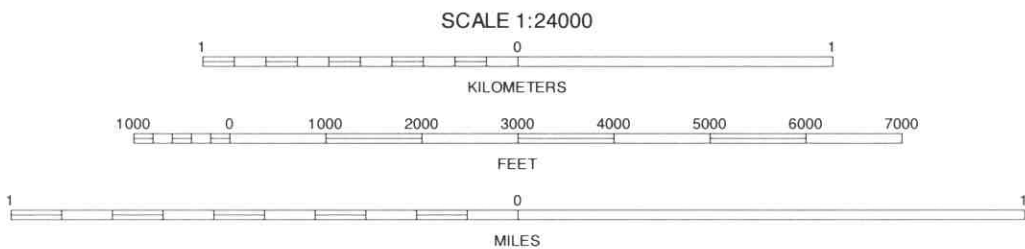
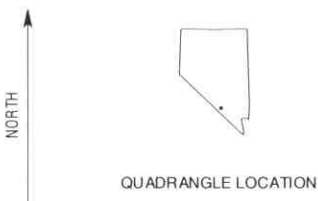
INDEX TO ADJOINING 7.5 MAPS

CRATER FLAT, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 29 OF 61



This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1 EAST OF BEATTY MOUNTAIN
			2 TOPOPAH SPRING NW
			3 TOPOPAH SPRING
4		5	4 CRATER FLAT
			5 JACKASS FLATS
			6 BIG DUNE
6	7	8	7 AMARGOSA VALLEY
			8 STRIPED HILLS

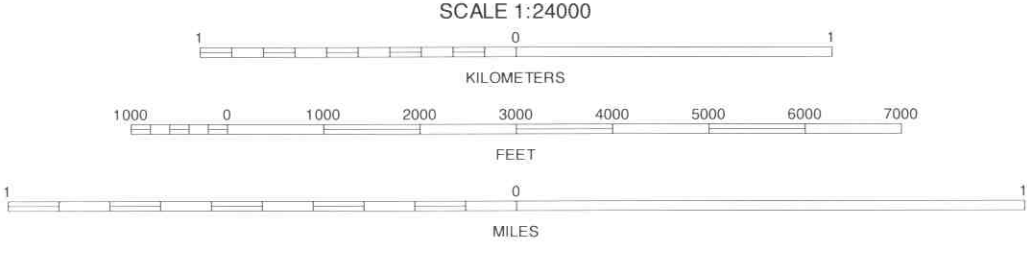
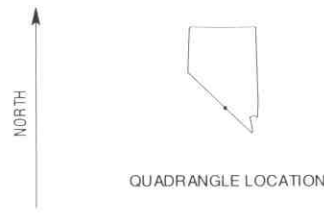
INDEX TO ADJOINING 7.5 MAPS

BUSTED BUTTE, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 30 OF 61



This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1 DAYLIGHT PASS
			2 GOLD CENTER
4		5	3 CARRARA CANYON
			4 CHLORIDE CITY
			5 ASHTON
			6 BEATTY JUNCTION
6	7	8	7 NEVARES PEAK
			8 LEES CAMP

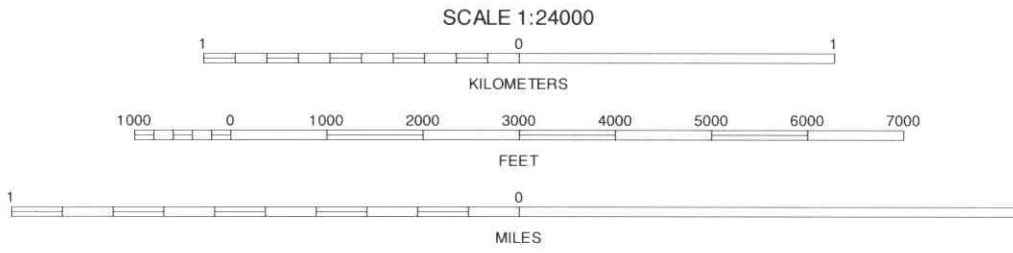
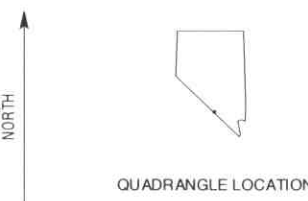
INDEX TO ADJOINING 7.5 MAPS

EAST OF CHLORIDE CITY, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 31 OF 61



This soil survey was compiled by the U. S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U. S. Department of Interior, Geological Survey, from 1975 aerial photography.

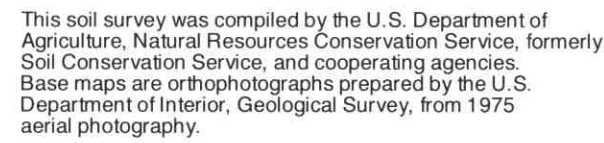
North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1 GOLD CENTER
			2 CARRARA CANYON
4		5	3 CRATER FLAT
			4 EAST OF CHLORIDE
			5 BIG DUNE
			6 NEVARES PEAK
6	7	8	7 LEES CAMP
			8 LEELEND

INDEX TO ADJOINING 7.5 MAPS

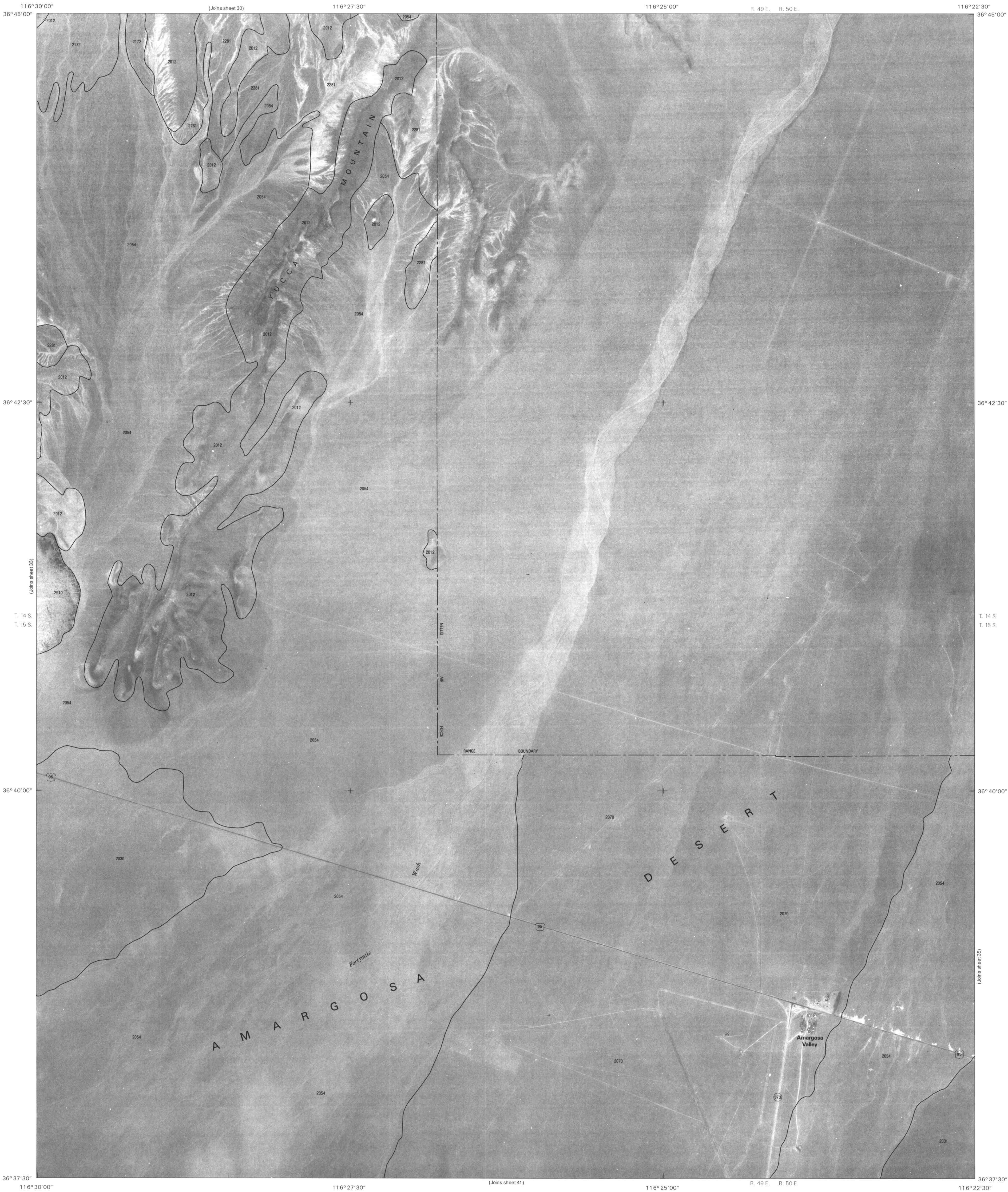
ASHTON, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 32 OF 61



NORTH



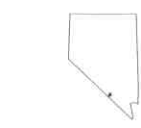
BIG DUNE, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 33 OF 61



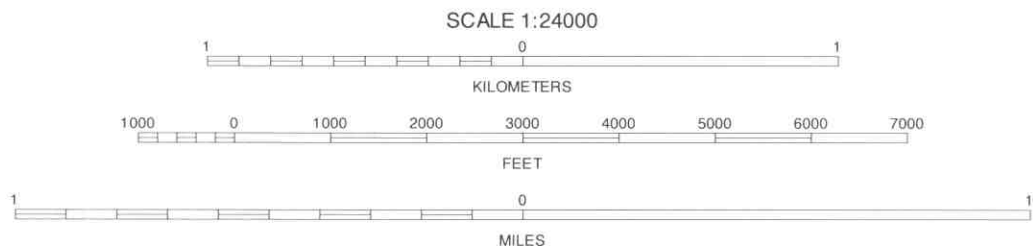
This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

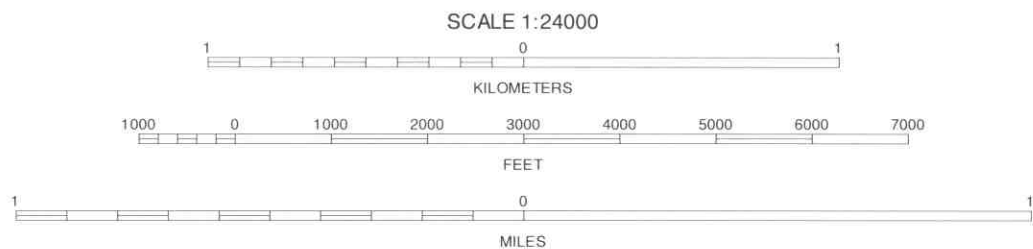
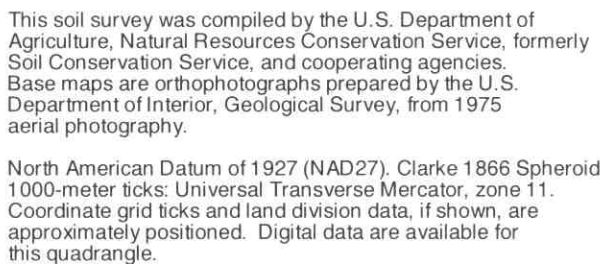


QUADRANGLE LOCATION



1	2	3	1 CRATER FLAT
4	5	2 BUSTED BUTTE	7.5 MINUTE SERIES
		3 JACKASS FLATS	SHEET NUMBER 34 OF 61
		4 BIG DUNE	
		5 STRIPED HILLS	
		6 LEELAND	
		7 SOUTH OF AMARGOSA VALLEY	
		8 SKELETON HILLS	

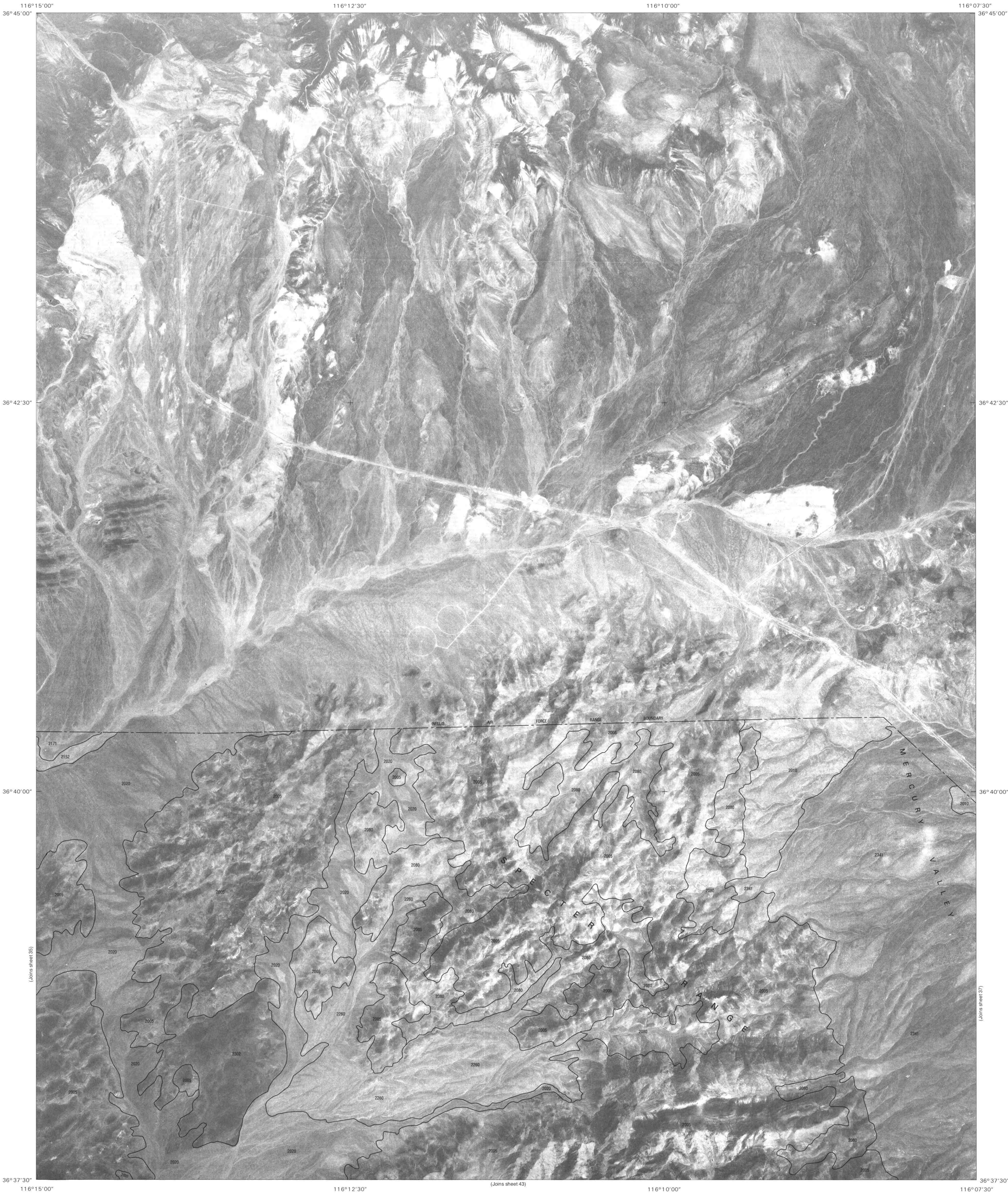
INDEX TO ADJOINING 7.5 MAPS



1	2	3	1 BUSTED BUTTE
			2 JACKASS FLATS
			3 SKULL MOUNTAIN
4		5	4 AMARGOSA VALLEY
			5 SPECTER RANGE NW
			6 SOUTH OF AMARGOSA VALLEY
6	7	8	7 SKELETON HILLS
			8 SPECTER RANGE SW

INDEX TO ADJOINING 7.5 MAPS

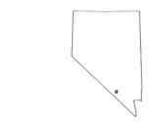
STRIPED HILLS, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 35 OF 61



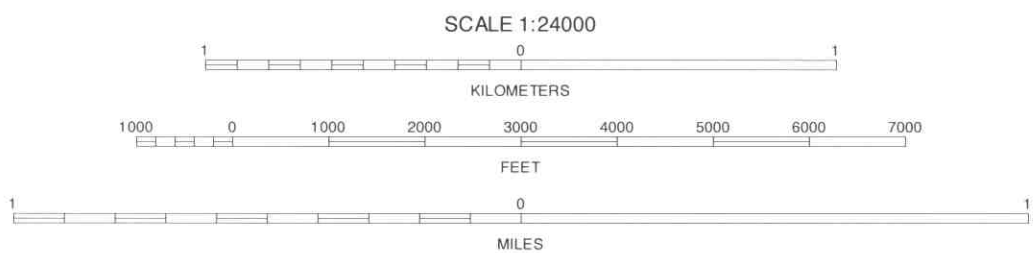
This soil survey was compiled by the U. S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U. S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



NYE COUNTY, NEVADA, SOUTHWEST PART NO. 36

1	2	3	1 JACKASS FLATS
			2 SKULL MOUNTAIN
4		5	3 CANE SPRING
			4 STRIPED HILLS
6	7	8	5 CAMP DESERT ROCK
			6 SKELETON HILLS
			7 SPECTER RANGE SW
			8 POINT OF ROCKS

INDEX TO ADJOINING 7.5 MAPS

INDEX TO ADJOINING 7.5 MAPS

SPECTER RANGE NW, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 36 OF 61



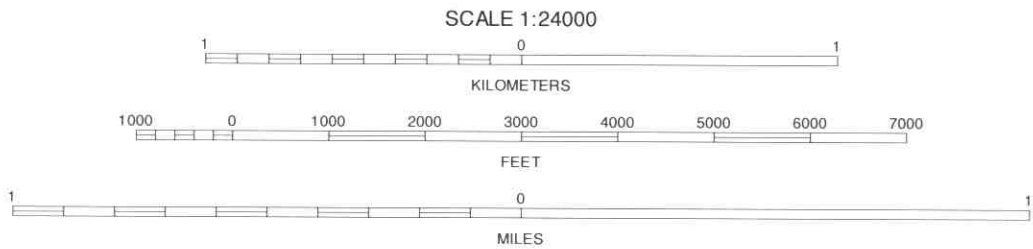
This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



NYE COUNTY, NEVADA, SOUTHWEST PART NO. 37

1	2	3	1 SKULL MOUNTAIN
			2 CANE SPRING
4		5	3 FRENCHMAN LAKE
			4 SPECTER RANGE NW
			5 MERCURY
6	7	8	6 SPECTER RANGE SW
			7 POINT OF ROCKS
			8 NIAVI WASH

INDEX TO ADJOINING 7.5 MAPS

INDEX TO ADJOINING 7.5 MAPS

CAMP DESERT ROCK, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 37 OF 61

116°00'00"
36°45'00"

115°57'30"

115°55'00"

115°52'30"
36°45'00"

36°42'30"

36°42'30"

36°40'00"

36°40'00"

36°37'30"
116°00'00"

115°57'30" (Joins sheet 45)

115°55'00"

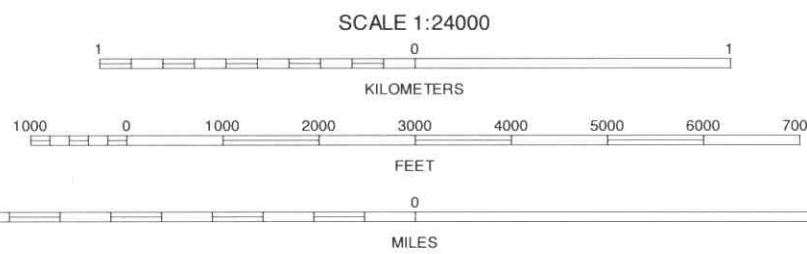
115°52'30"
36°37'30"

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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUADRANGLE LOCATION

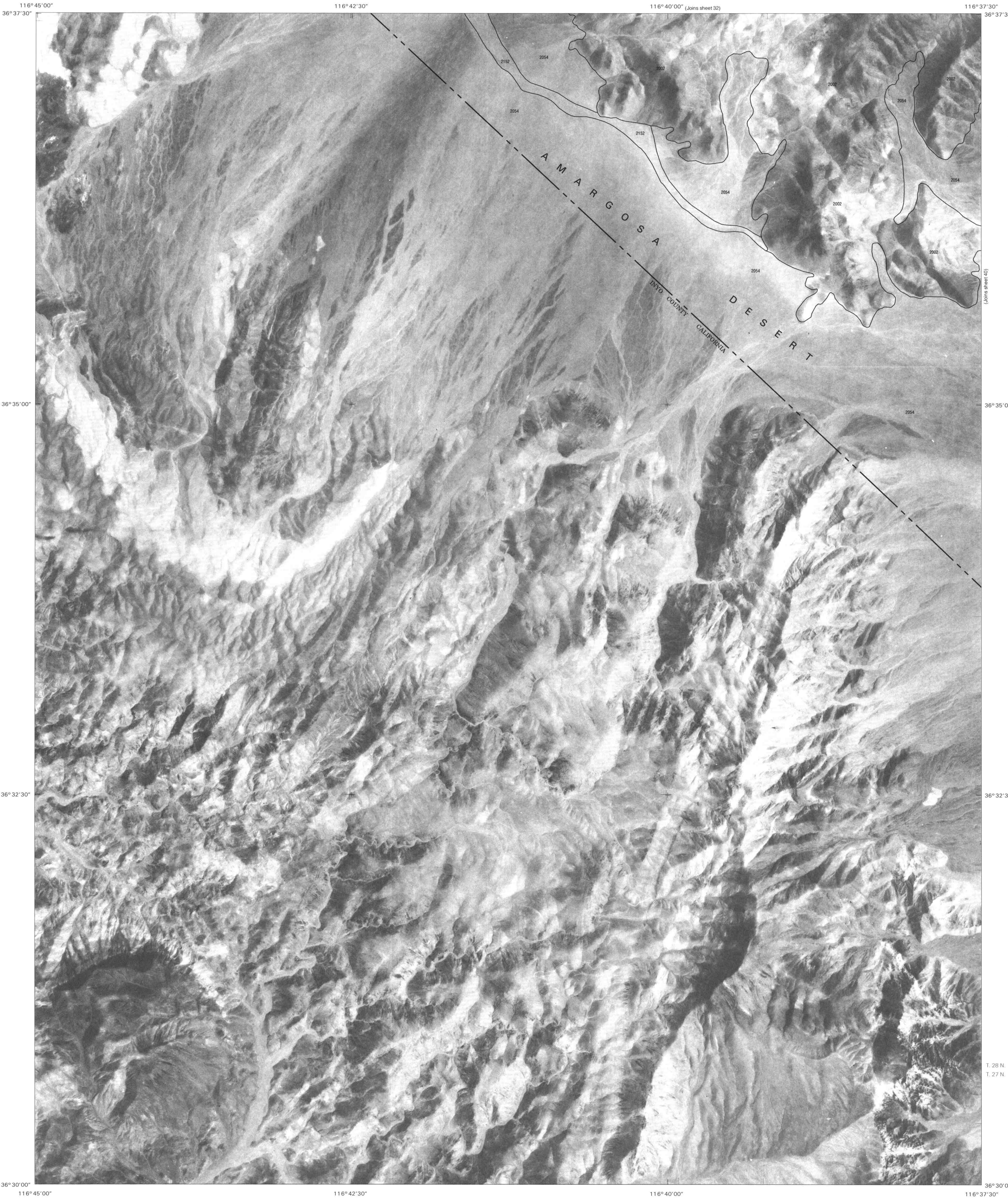


NYE COUNTY, NEVADA, SOUTHWEST PART NO. 38

1	2	3	1 CANE SPRING
4	5	6	2 FRENCHMAN LAKE
7	8	9	3 FRENCHMAN LAKE SE
10	11	12	4 CAMP DESERT ROCK
13	14	15	5 MERCURY NE
16	17	18	6 POINT OF ROCKS
19	20	21	7 NAVA WASH
22	23	24	8 MERCURY SE

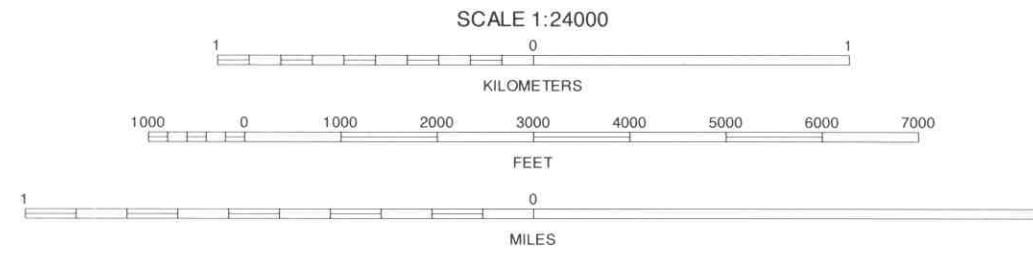
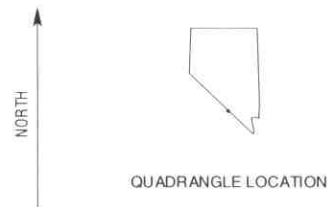
INDEX TO ADJOINING 7.5 MAPS

MERCURY, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 38 OF 61



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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1 EAST OF CHLORIDE CITY
4	5	2 ASHTON	3 BIG DUNE
6	7	8	4 NEVARES PEAK
			5 LELAND
			6 FURNACE CREEK
			7 ECHO CANYON
			8 EAST OF ECHO CANYON

LEES CAMP, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 39 OF 61



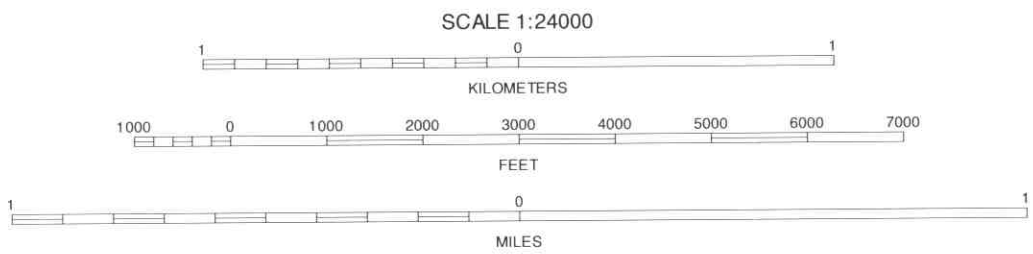
This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27). Clarke 1866 Spheroid 1000-meter ticks. Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION

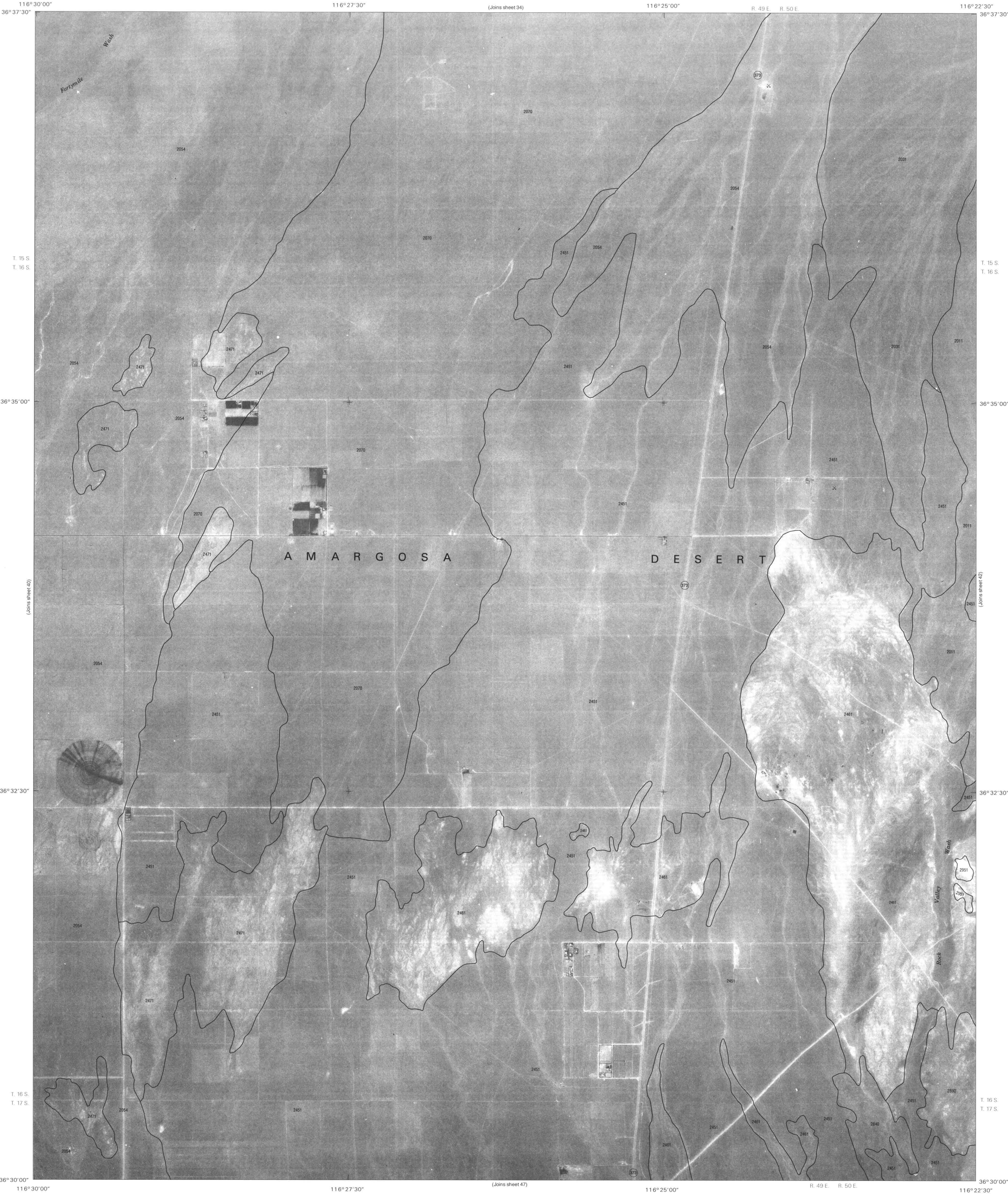


NYE COUNTY, NEVADA, SOUTHWEST PART NO. 40

1	2	3	1 ASHTON
			2 BIG DUNE
			3 AMARGOSA VALLEY
4		5	4 LEES CAMP
			5 SOUTH OF AMARGOSA VALLEY
			6 ECHO CANYON
6	7	8	7 EAST OF ECHO CANYON
			8 FRANKLIN WELL

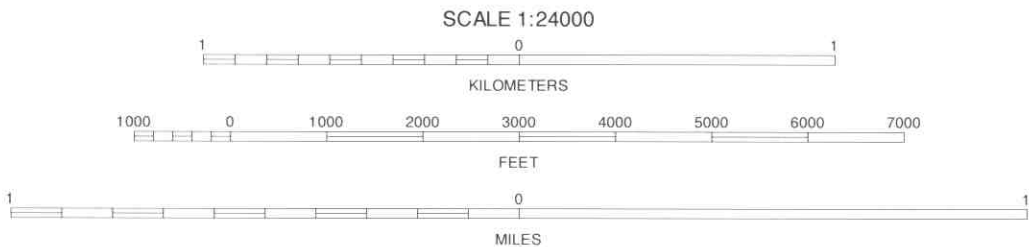
INDEX TO ADJOINING 7.5 MAPS

LEELAND, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 40 OF 61



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North American Datum of 1927 (NAD27). Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

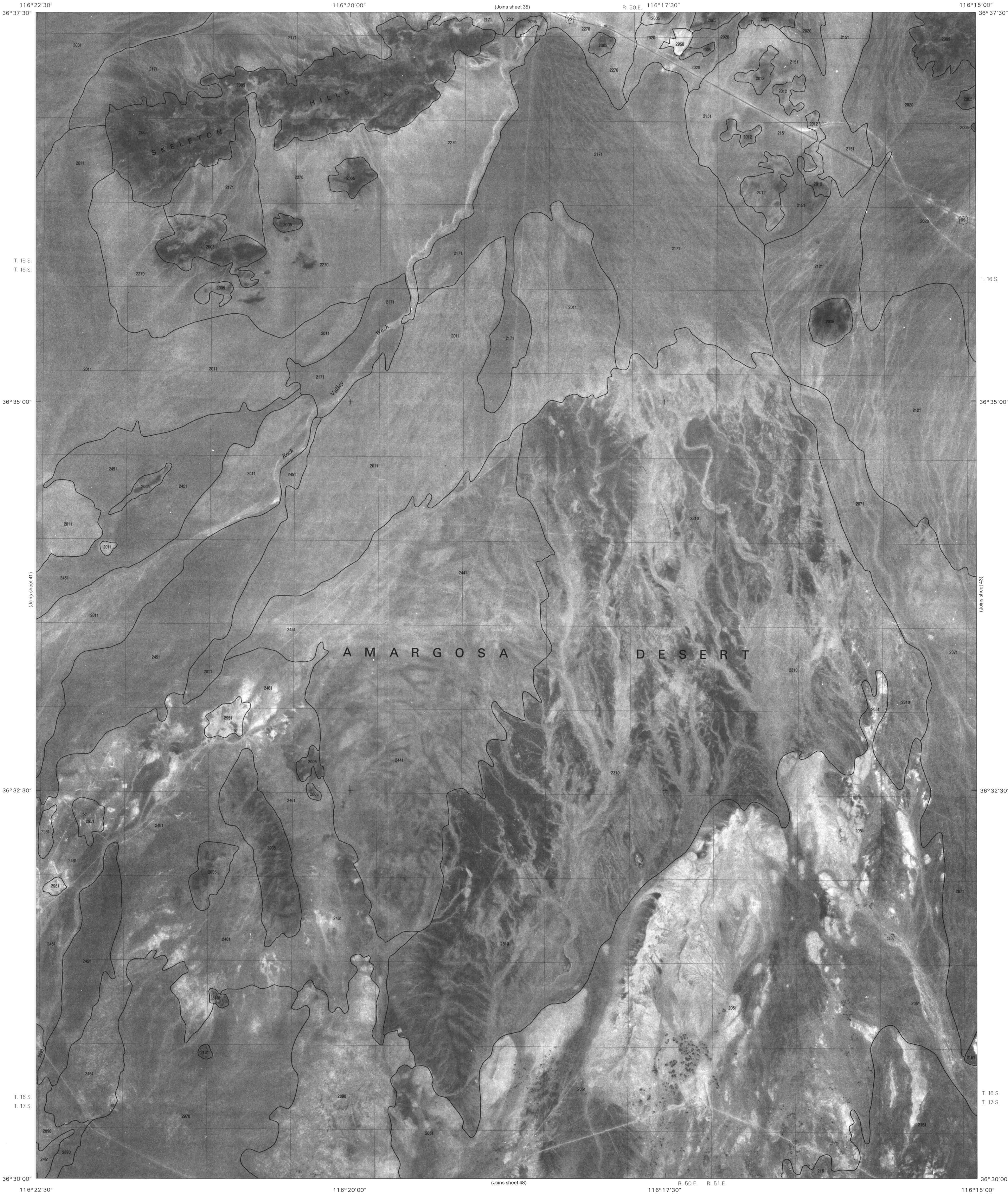


NYE COUNTY, NEVADA, SOUTHWEST PART NO. 41

1	2	3	1 BIG DUNE
4	5	2 AMARGOSA VALLEY	
6	7	3 STRIPED HILLS	
		4 LEE LAND	
		5 SKELETON HILLS	
		6 EAST OF ECHO CANYON	
		7 FRANKLIN WELL	
		8 DEVILS HOLE	

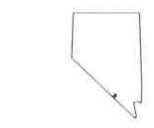
SOUTH OF AMARGOSA VALLEY, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 41 OF 61

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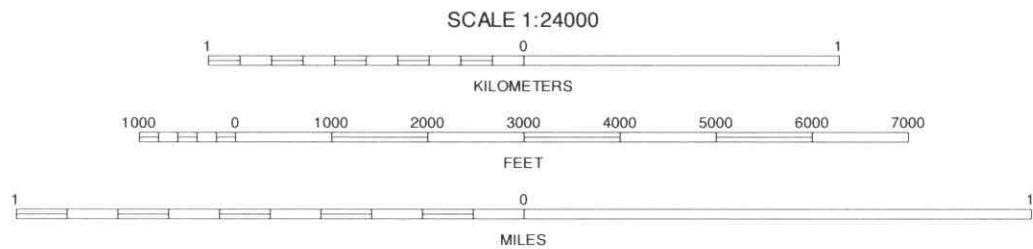


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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



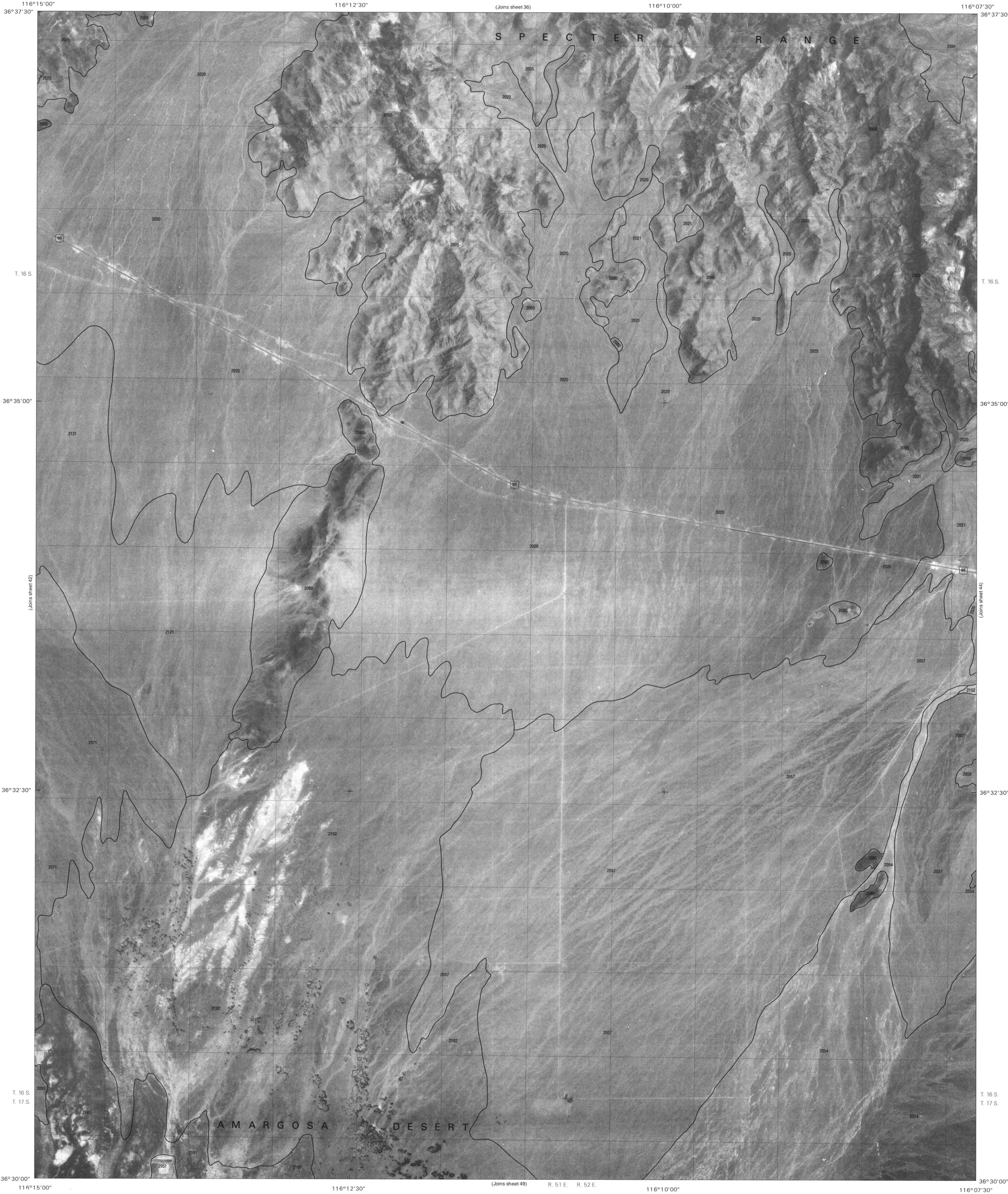
QUADRANGLE LOCATION



1	2	3	1 AMARGOSA VALLEY
			2 STRIPED HILLS
			3 SPECTER RANGE NW
4		5	4 SOUTH OF AMARGOSA VALLEY
			5 SPECTER RANGE SW
			6 FRANKLIN WELL
6	7	8	7 DEVILS HOLE
			8 AMARGOSA FLAT

INDEX TO ADJOINING 7.5 MAPS

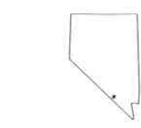
SKELETON HILLS, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 42 OF 61



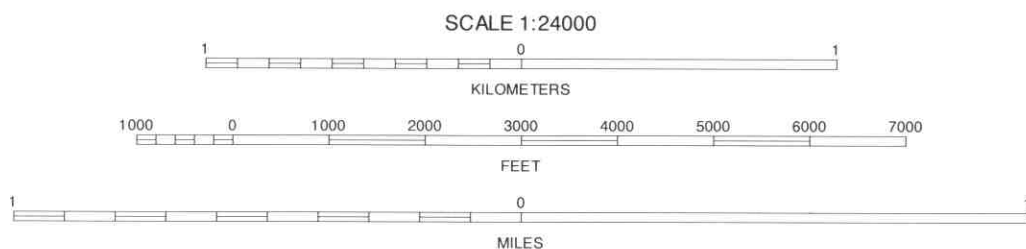
This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27). Clarke 1866 Spheroid. 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



1	2	3	1	STRIPED HILLS
4	5	6	2	SPECTER RANGE NW
7	8	9	3	CAMP DESERT ROCK
10	11	12	4	SKELETON HILLS
13	14	15	5	POINT OF ROCKS
16	17	18	6	DEVILS HOLE
19	20	21	7	AMARGOSA FLAT
22	23	24	8	MOUNT SCHADER

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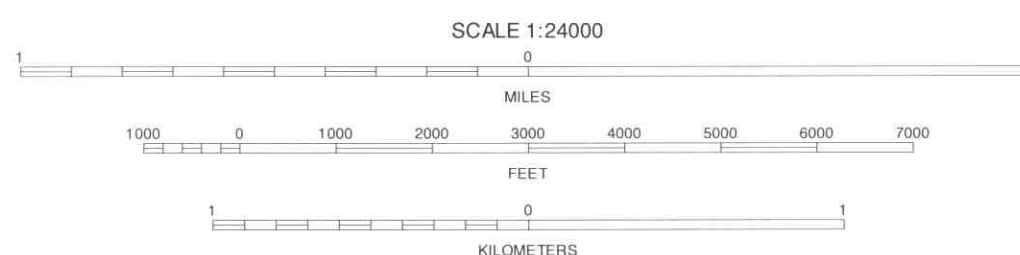
SPECTER RANGE SW, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 43 OF 61



This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27). Clarke 1866 Spheroid. 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

North American Datum of 1927 (NAD27). Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are
approximately positioned. Digital data are available for
this quadrangle.



1	2	3	1 SPECTER RANGE NW
			2 CAMP DESERT ROCK
			3 MERCURY
4		5	4 SPECTER RANGE SW
			5 NIAVI WASH
6	7	8	6 AMARGOSA FLAT
			7 MOUNT SCHADER
			8 MOUNT STIRLING

INDEX TO ADJOINING 7.5 MAPS

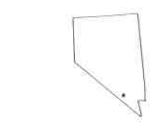
POINT OF ROCKS, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 44 OF 61



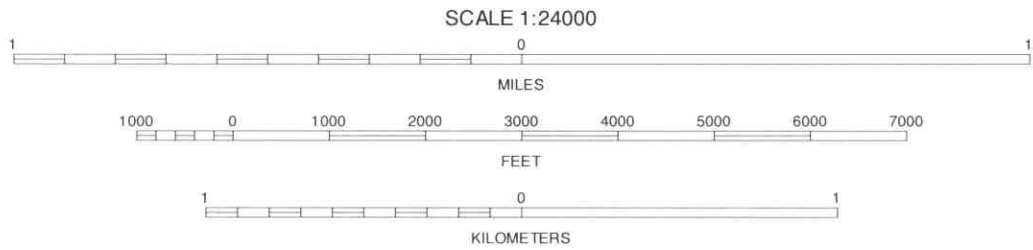
This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION

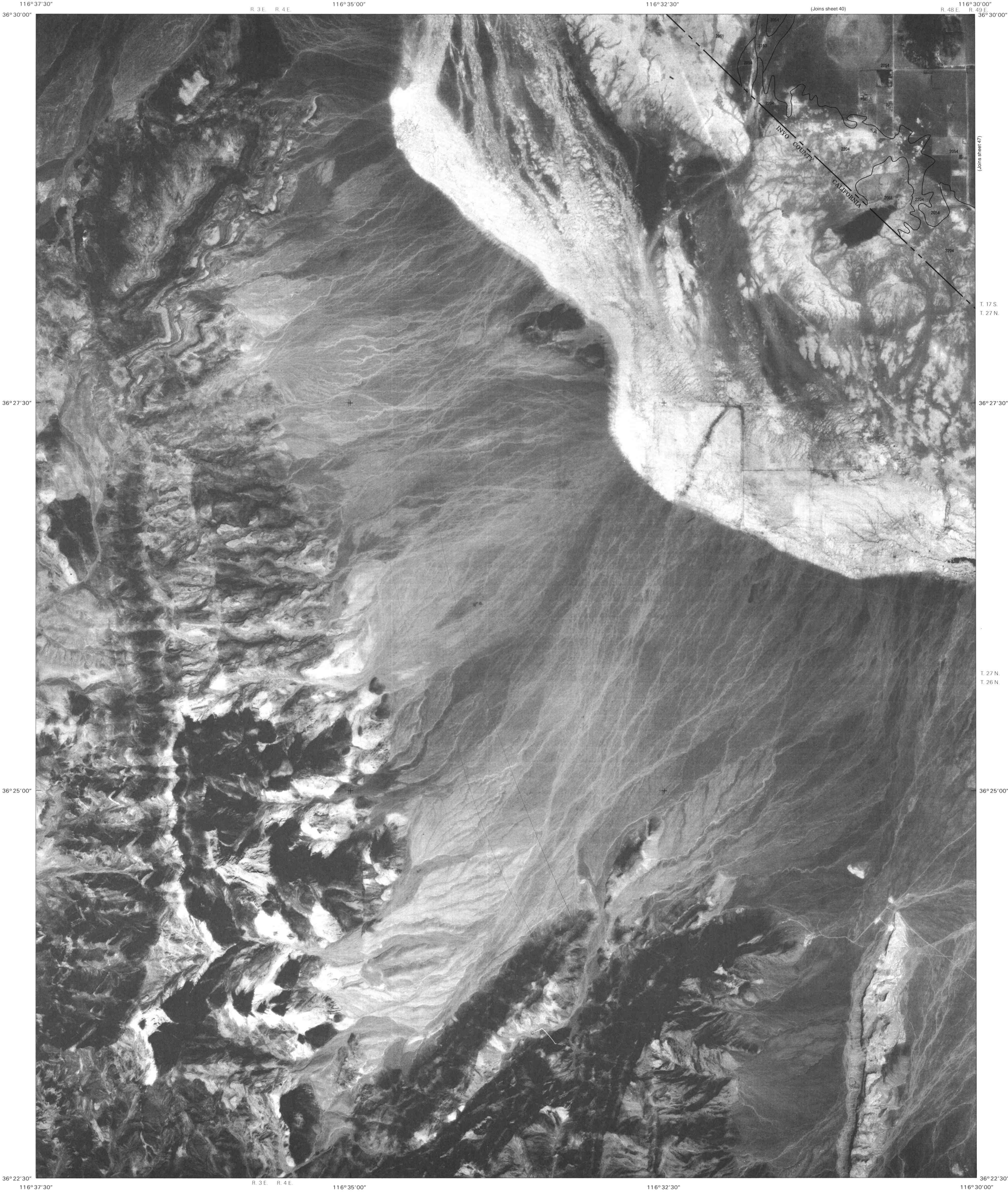


NYE COUNTY, NEVADA, SOUTHWEST PART NO. 45

1	2	3	1	CAMP DESERT ROCK
4	5	6	2	MERCURY
7	8	9	3	MERCURY NE
			4	POINT OF ROCKS
			5	MERCURY SE
			6	MOUNT SCHADER
			7	MOUNT STIRLING
			8	WILLOW PEAK

INDEX TO ADJOINING 7.5 MAPS

NIAVI WASH, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 45 OF 61



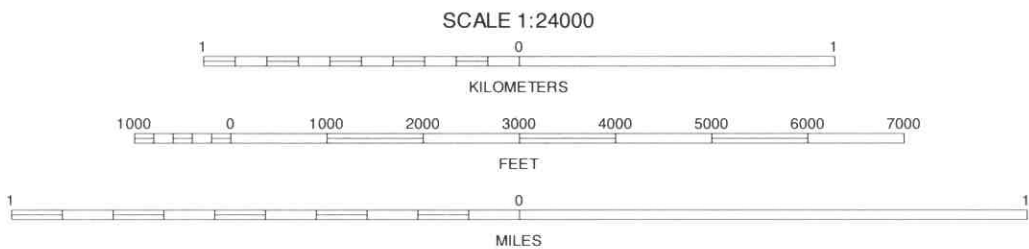
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North American Datum of 1927 (NAD27) Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



NYE COUNTY, NEVADA, SOUTHWEST PART NO. 46

1	2	3	1 LEES CAMP
			2 LELAND
			3 SOUTH OF AMARGOSA VALLEY
4		5	4 ECHO CANYON
			5 FRANKLIN WELL
			6 RYAN
6	7	8	7 EAST OF RYAN
			8 DEATH VALLEY JUNCTION

INDEX TO ADJOINING 7.5 MAPS

EAST OF ECHO CANYON, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 46 OF 61



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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION

SCALE 1:24000

0 1000 2000 3000 4000 5000 6000 7000

KILOMETERS

0 1000 2000 3000 4000 5000 6000 7000

FEET

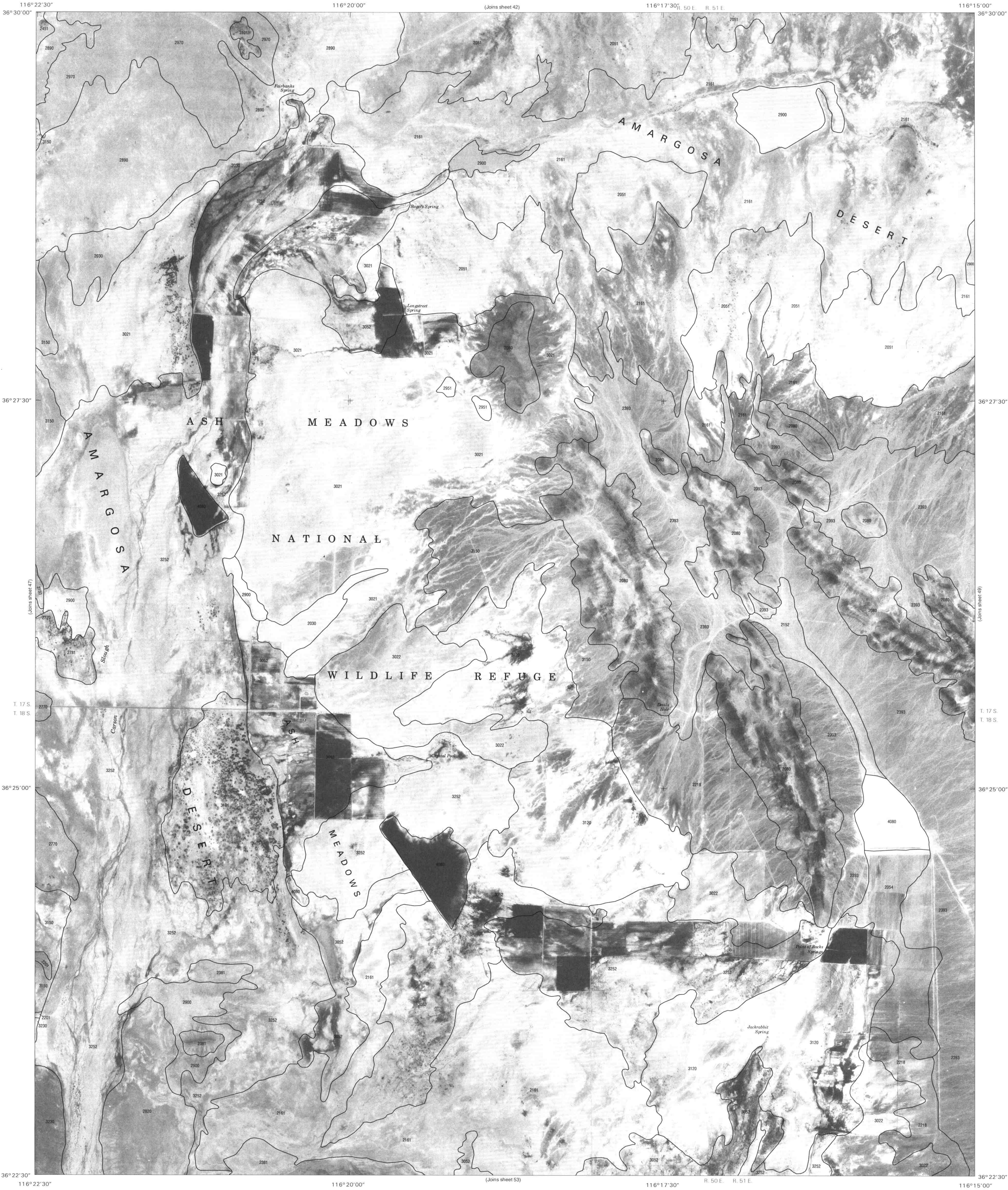
0 1000 2000 3000 4000 5000 6000 7000

MILES

1	2	3	1	LEELAND
2	3	4	2	SOUTH OF AMARGOSA VALLEY
3	4	5	3	SKELETON HILLS
4	5	6	4	EAST OF ECHO CANYON
5	6	7	5	DEVILS HOLE
6	7	8	6	EAST OF RYAN
7	8	9	7	DEATH VALLEY JUNCTION
8	9	10	8	BOLE SPRING

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FRANKLIN WELL, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 47 OF 61

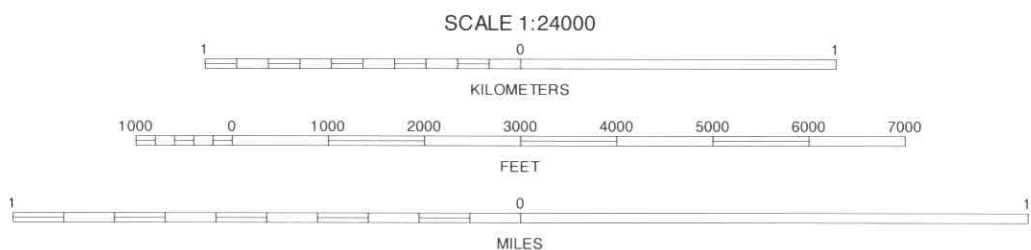


This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27). Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH

QUADRANGLE LOCATION



NYE COUNTY, NEVADA, SOUTHWEST PART NO. 48

1	2	3	1 SOUTH OF AMARGOSA VALLEY
			2 SKELETON HILLS
			3 SPECTER RANGE SW
4		5	4 FRANKLIN WELL
			5 AMARGOSA FLAT
			6 DEATH VALLEY JUNCTION
6	7	8	7 BOLE SPRING
			8 HIGH PEAK

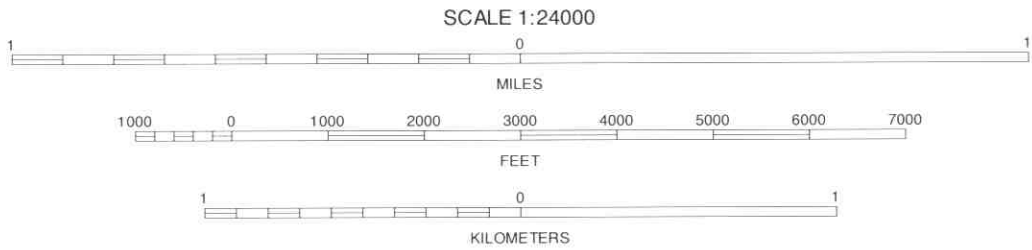
INDEX TO ADJOINING 7.5 MAPS

DEVILS HOLE, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 48 OF 61



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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



NYE COUNTY, NEVADA, SOUTHWEST PART NO. 49

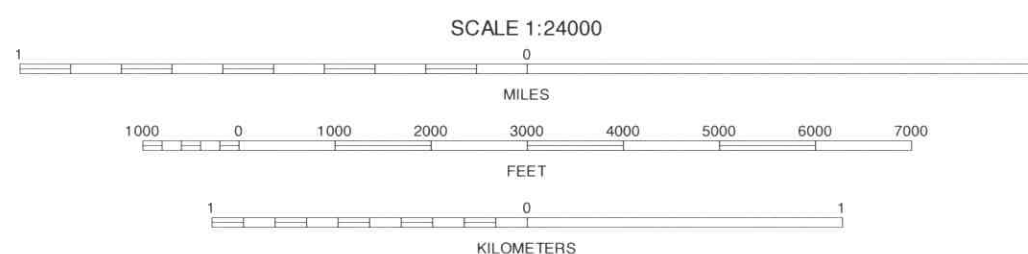
1	2	3	1 SKELETON HILLS
			2 SPECTER RANGE SW
			3 POINT OF ROCKS
4		5	4 DEVILS HOLE
			5 MOUNT SCHADDER
			6 BOLE SPRING
6	7	8	7 HIGH PEAK
			8 LAST CHANCE RANGE

INDEX TO ADJOINING 7.5 MAPS

AMARGOSA FLAT, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 49 OF 61



North American Datum of 1927 (NAD27). Clarke 1866 Spheroid.
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are
approximately positioned. Digital data are available for
this quadrangle.

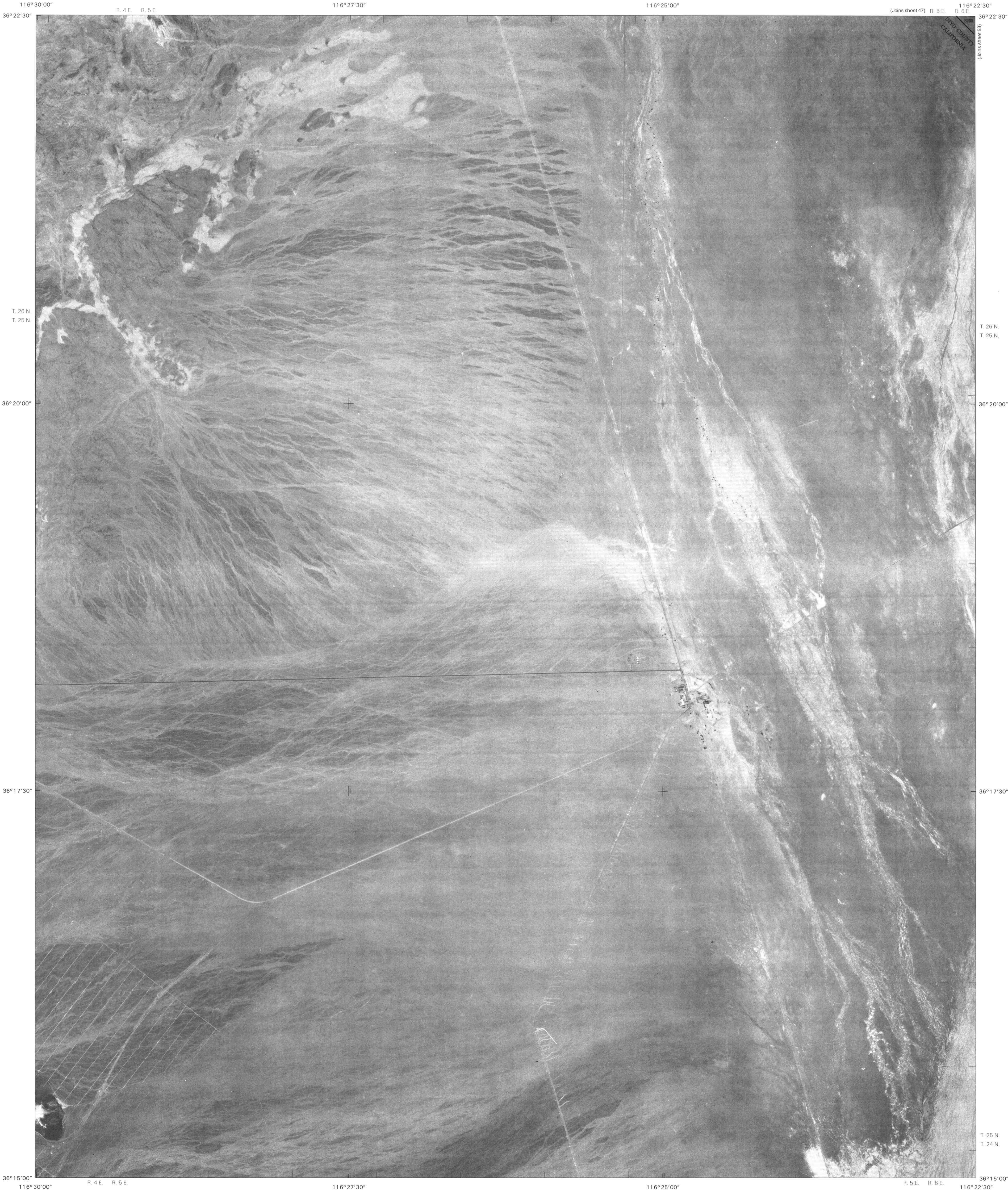


1	2	3	1 SPECTER RANGE SW
			2 POINT OF ROCKS
4		5	3 NIAVI WASH
			4 AMARGOSA FLAT
6	7	8	5 MOUNT STIRLING
			6 HIGH PEAK
			7 LAST CHANCE RANGE
			8 HORSE SPRINGS

INDEX TO ADJOINING 7.5 MAPS

MOUNT SCHADER, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 50 OF 61



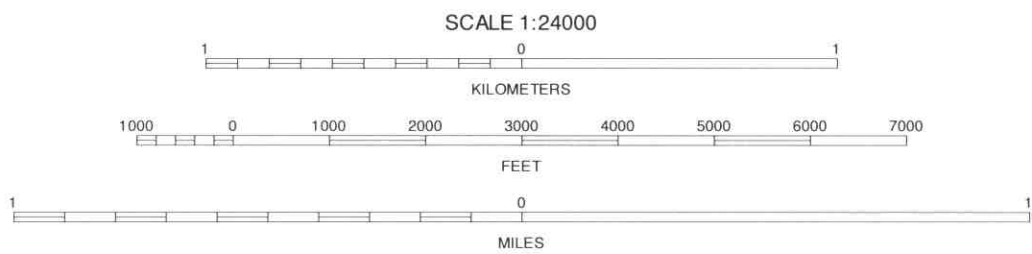


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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



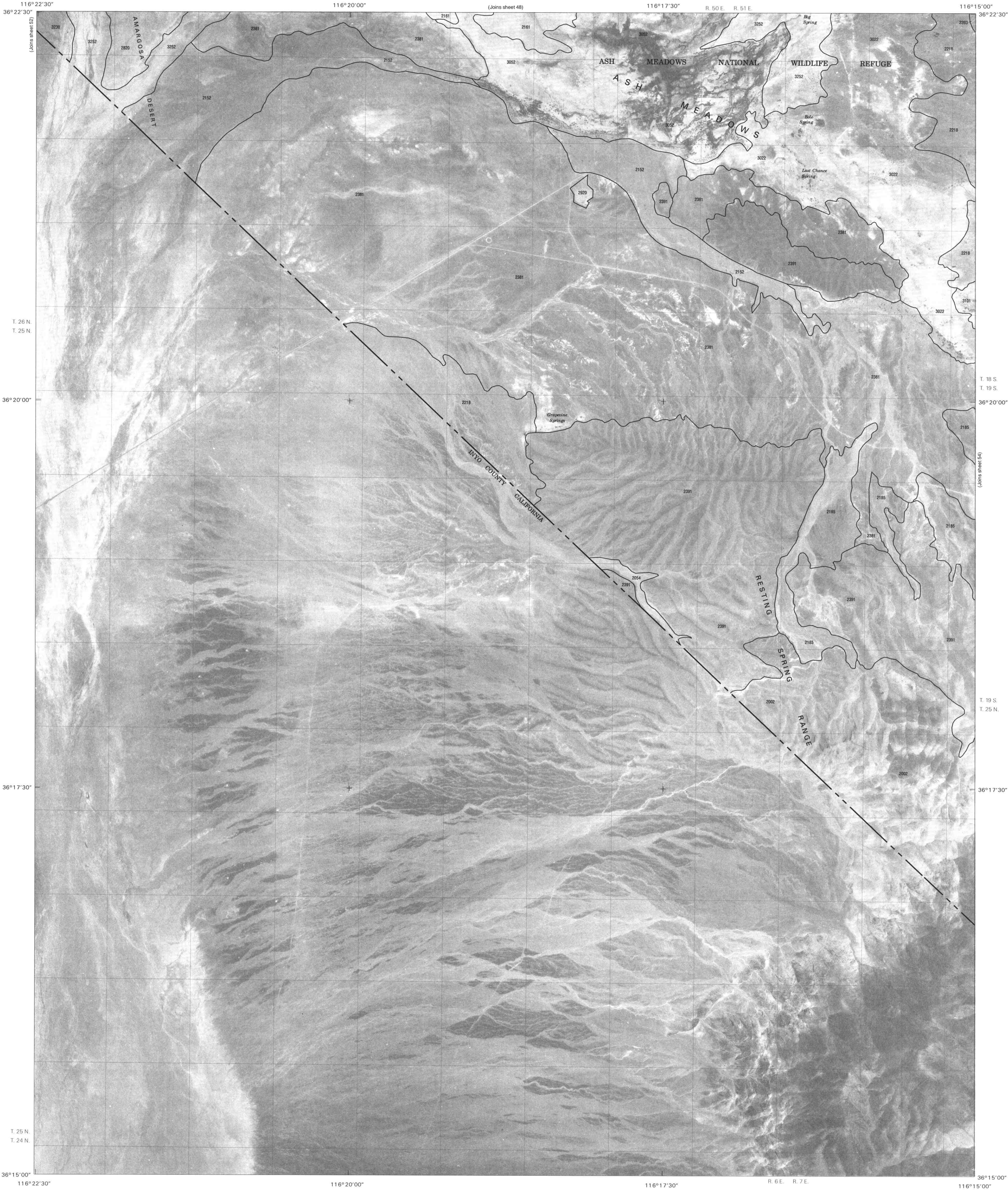
QUADRANGLE LOCATION



1	2	3	1 EAST OF ECHO CANYON
			2 FRANKLIN WELL
4		5	3 DEVILS HOLE
			4 EAST OF RYAN
			5 BOLE SPRING
6	7	8	6 GREEN WATER CANYON
			7 WEST OF EAGLE MOUNTAIN
			8 EAGLE MOUNTAIN

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INDEX TO ADJOINING 7.5 MAPS



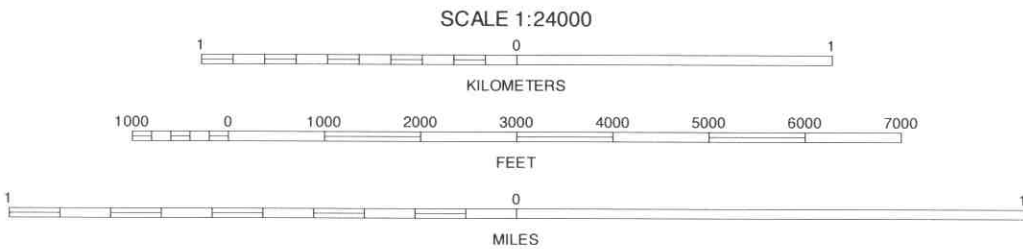
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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION

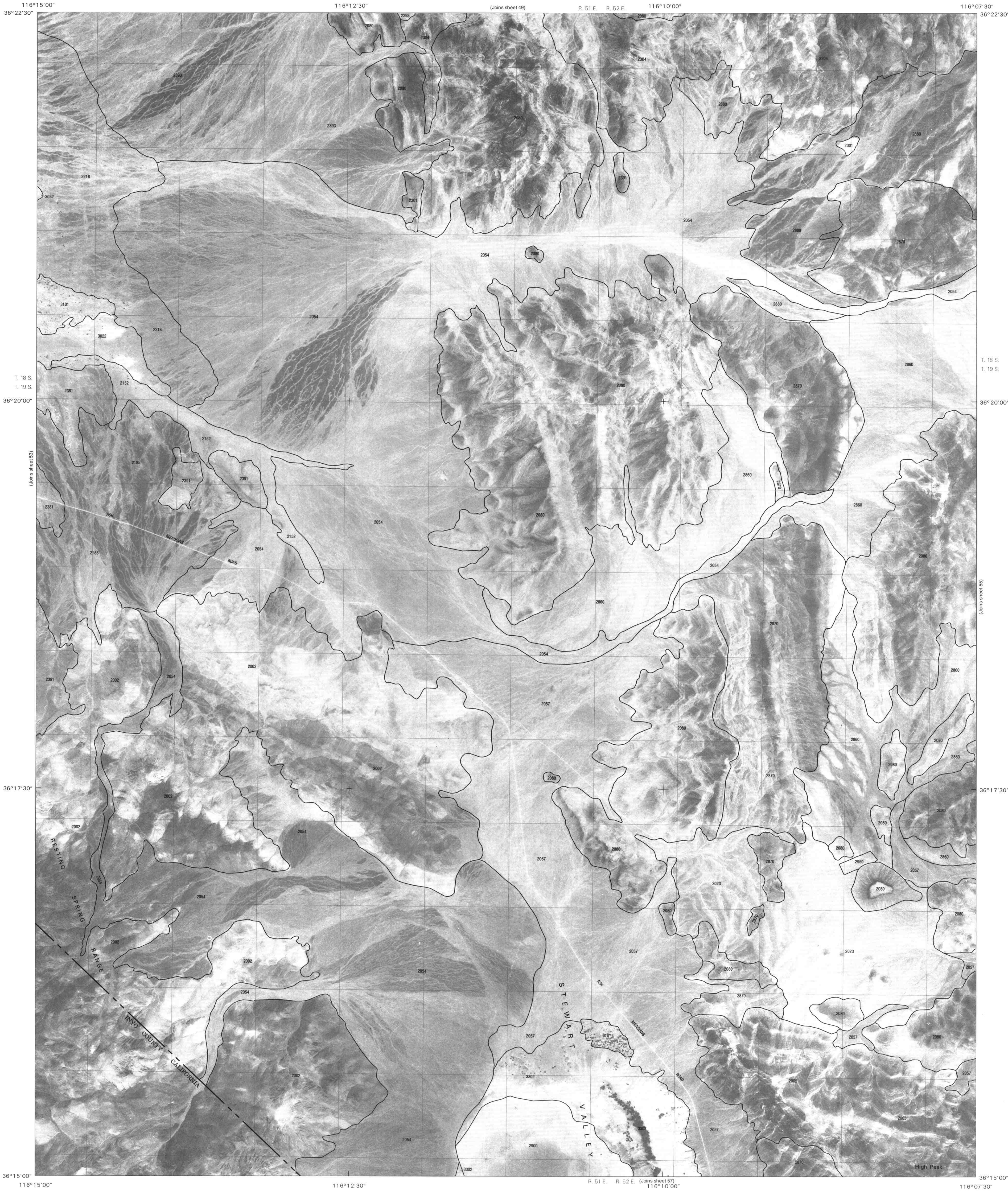


NYE COUNTY, NEVADA, SOUTHWEST PART NO. 53

1	2	3	1 FRANKLIN WELL
			2 DEVILS HOLE
			3 AMARGOSA FLAT
4		5	4 DEATH VALLEY JUNCTION
			5 HIGH PEAK
			6 WEST OF EAGLE MOUNTAIN
6	7	8	7 EAGLE MOUNTAIN
			8 STEWART VALLEY

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BOLE SPRING, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 53 OF 61



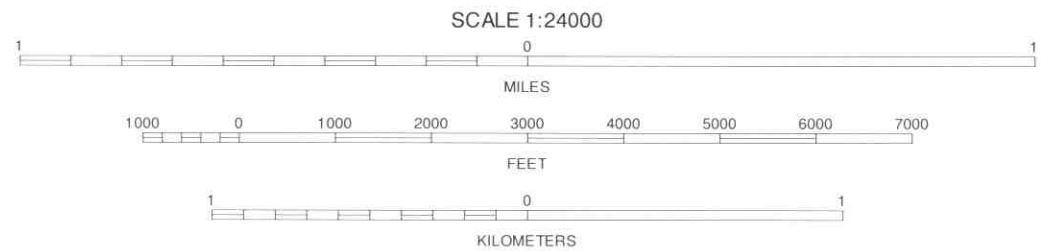
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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



NYE COUNTY, NEVADA, SOUTHWEST PART NO. 54

1	2	3	1 DEVILS HOLE
4	5	6	2 AMARGOSA FLAT
7	8	9	3 MOUNT SCHADER
10	11	12	4 BOLE SPRING
13	14	15	5 LAST CHANCE RANGE
16	17	18	6 EAGLE MOUNTAIN
19	20	21	7 STEWART VALLEY
22	23	24	8 SIXMILE SPRING

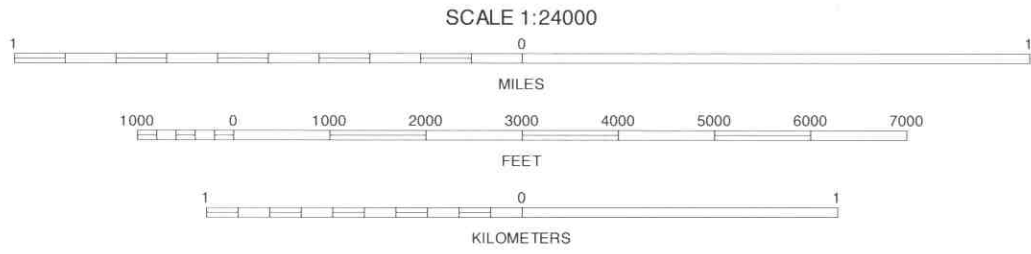
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HIGH PEAK, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 54 OF 61



This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



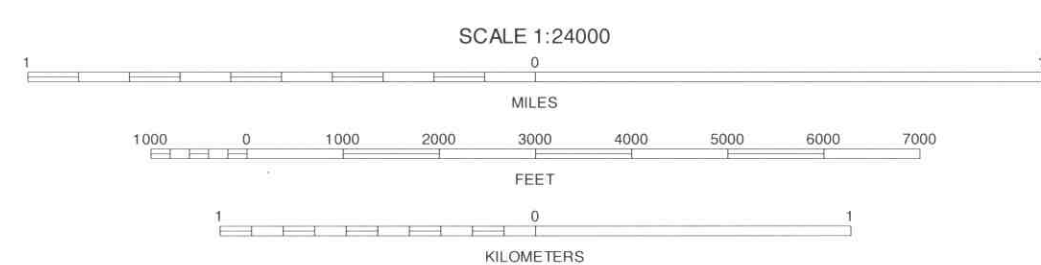
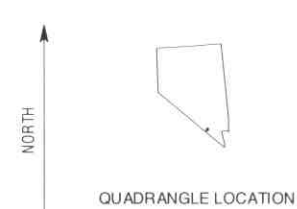
1	2	3	1
4	5	6	2
7	8	9	3

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LAST CHANCE RANGE, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 55 OF 61



North American Datum of 1927 (NAD27). Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are
approximately positioned. Digital data are available for
this quadrangle.



1	2	3	1 MOUNT SCHADER
			2 MOUNT STIRLING
			3 WILLOW PEAK
4		5	4 LAST CHANCE RANGE
			5 WHEELER WELL
			6 SIXMILE SPRING
6	7	8	7 PAHRUMP
			8 PAHRUMP NE

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HORSE SPRINGS, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 56 OF 61



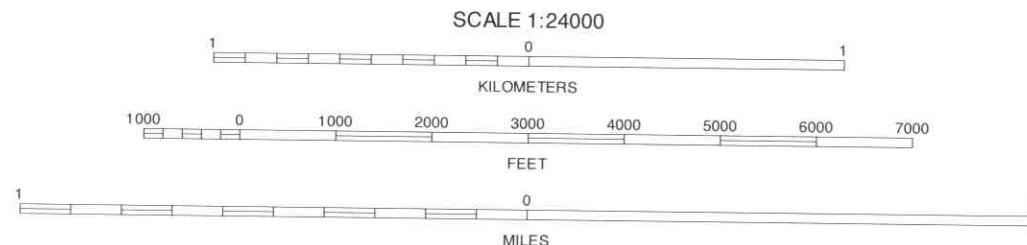
This soil survey was compiled by the U.S. Department of Agriculture, Natural Resources Conservation Service, formerly Soil Conservation Service, and cooperating agencies. Base maps are orthophotographs prepared by the U.S. Department of Interior, Geological Survey, from 1975 aerial photography.

North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION

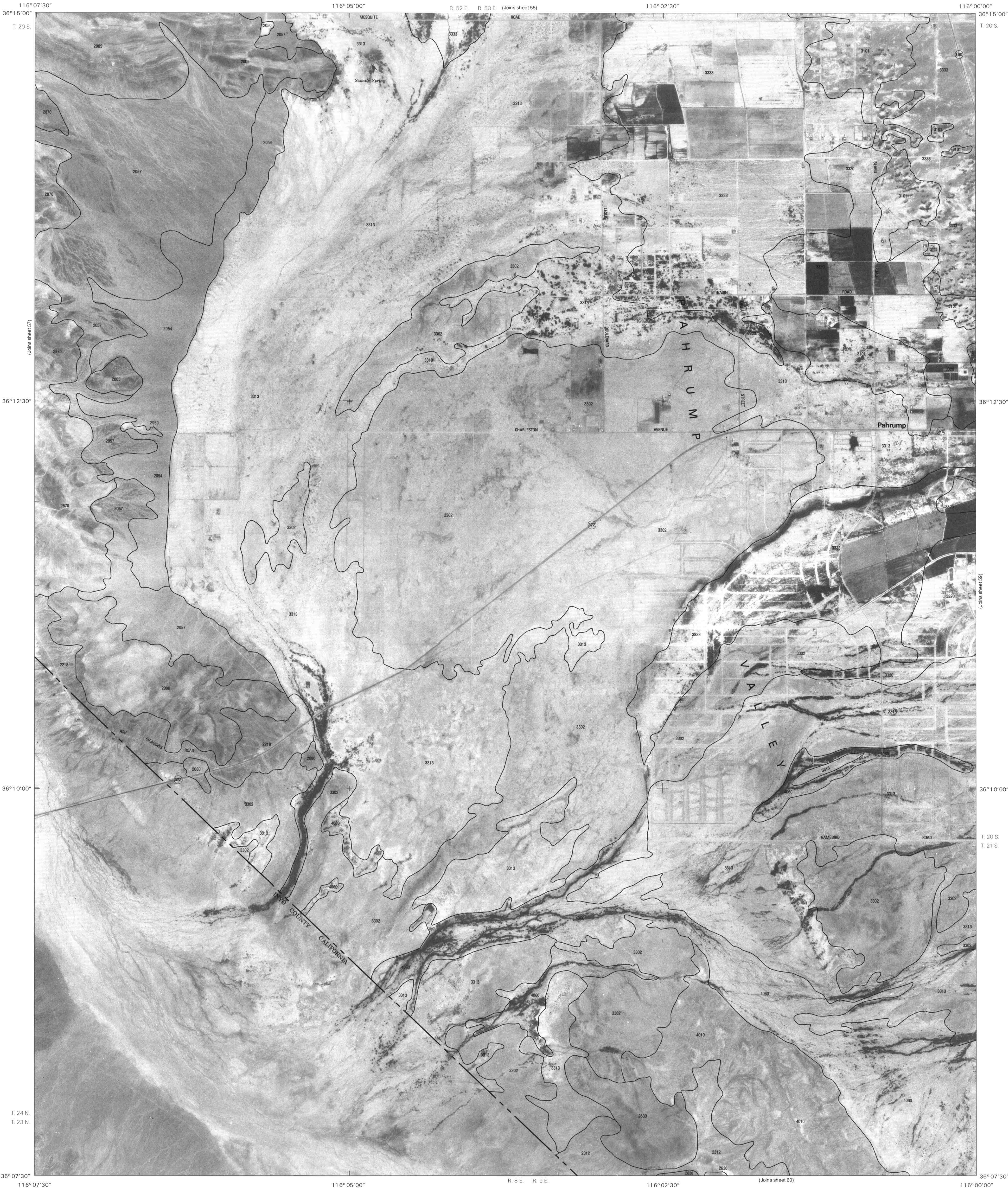


NYE COUNTY, NEVADA, SOUTHWEST PART NO. 57

1	2	3	1 BOLE SPRING
4	5	2 HIGH PEAK	3 LAST CHANCE RANGE
6	7	4 EAGLE MOUNTAIN	5 SIXMILE SPRING
		6 EAST OF DEADMAN PASS	7 TWELVEMILE SPRING
		8 NOFAH PEAK	

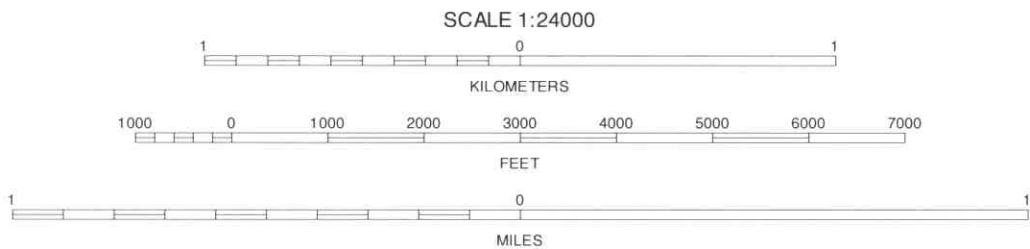
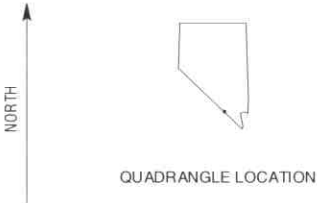
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STEWART VALLEY, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 57 OF 61



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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid
1000-meter ticks: Universal Transverse Mercator, zone 11.
Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



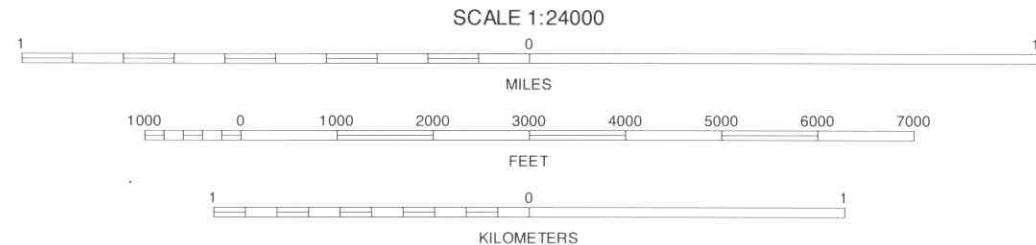
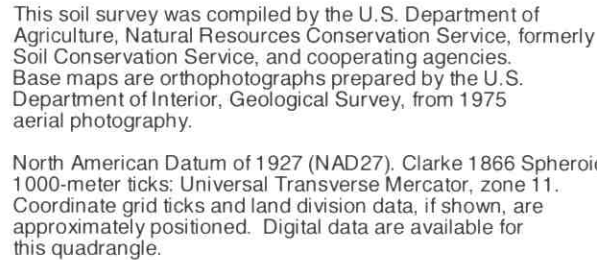
NYE COUNTY, NEVADA, SOUTHWEST PART NO. 58

1	2	3
4	5	6
7	8	9

1. HIGH PEAK
2. LAST CHANCE RANGE
3. HORSE SPRINGS
4. STEWART VALLEY
5. PAHRUMP
6. TWELVEMILE SPRING
7. NOPAH PEAK
8. MOUND SPRING

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SIXMILE SPRING, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 58 OF 61



1	2	3	1 LAST CHANCE RANGE
			2 HORSE SPRINGS
			3 WHEELER WELL
4		5	4 SIXMILE SPRING
			5 PAHRUMP NE
			6 NOPAH PEAK
6	7	8	7 MOUND SPRING
			8 HIDDEN HILLS RANCH

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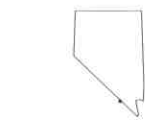
PAHRUMP, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 59 OF 61



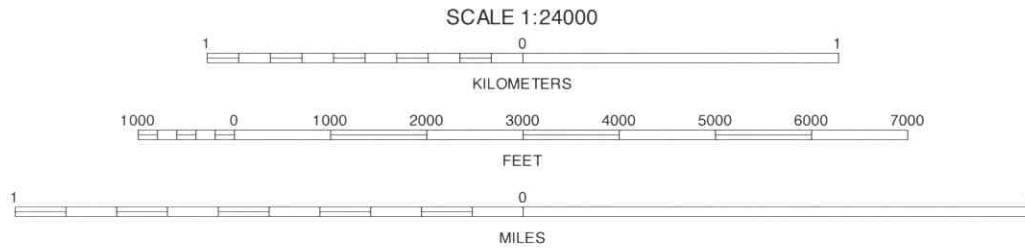
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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1,000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.

NORTH



QUADRANGLE LOCATION



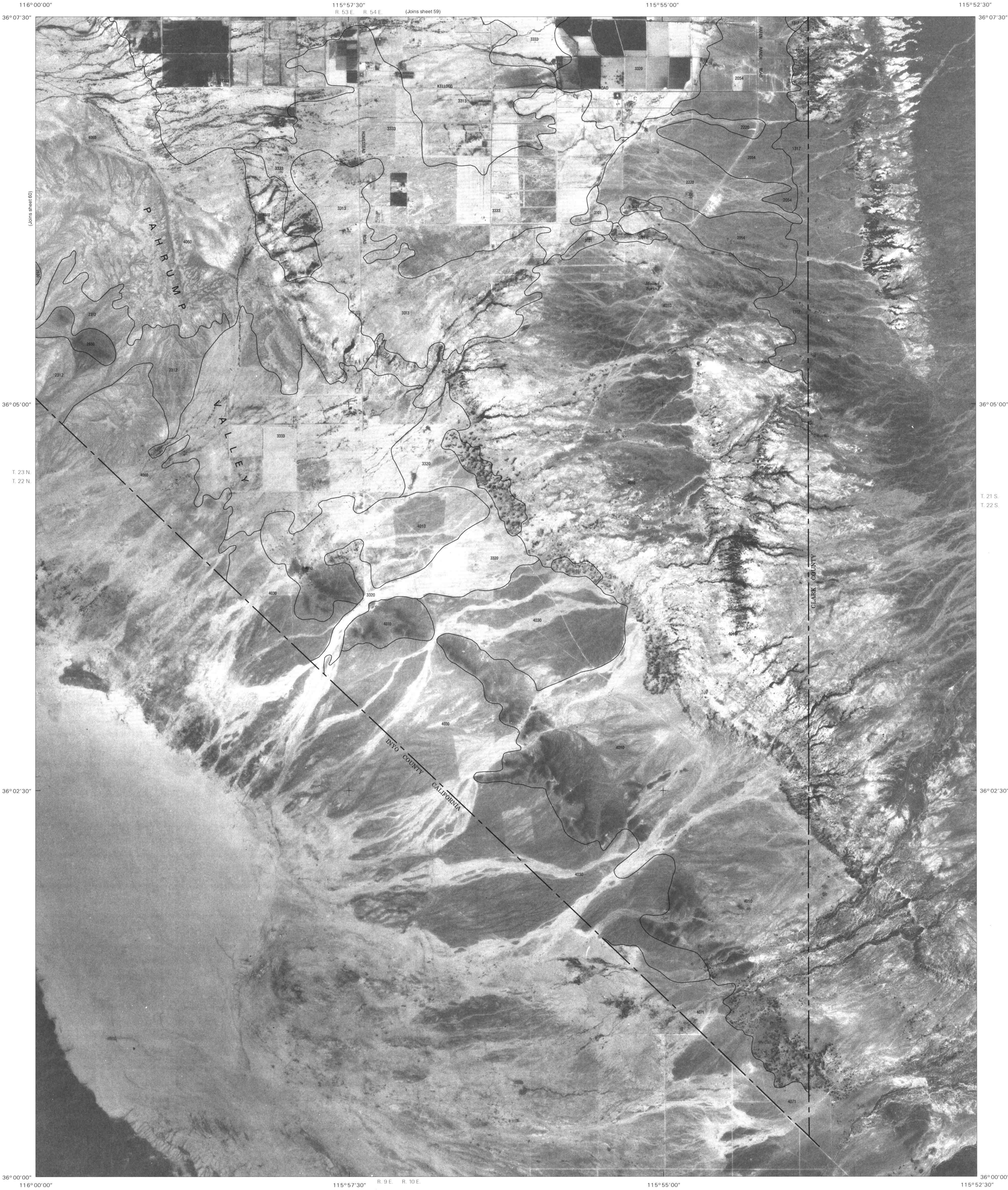
NYE COUNTY, NEVADA, SOUTHWEST PART NO. 60

1	2	3	1 STEWART VALLEY
			2 SIXMILE SPRING
			3 PAHRUMP
4		5	4 TWELVEMILE SPRING
			5 MOUND SPRING
			6 RESTING SPRING
6	7	8	7 NORTH OF TECOPA PASS
			8 CALVADA SPRINGS

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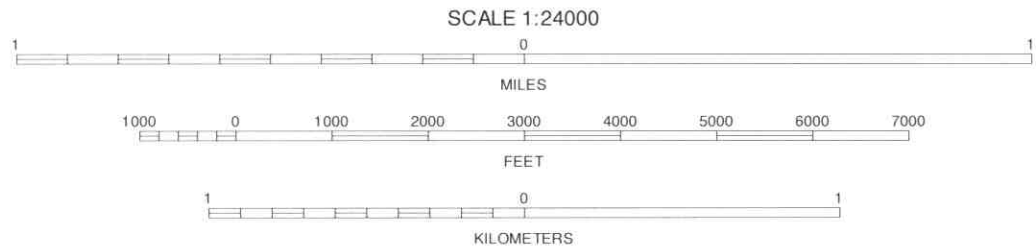
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NOPAH PEAK, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 60 OF 61



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North American Datum of 1927 (NAD27), Clarke 1866 Spheroid 1000-meter ticks: Universal Transverse Mercator, zone 11. Coordinate grid ticks and land division data, if shown, are approximately positioned. Digital data are available for this quadrangle.



1	2	3	1 SIXMILE SPRING
			2 PAHRUMP
			3 PAHRUMP NE
4		5	4 NOPAH PEAK
			5 HIDDEN HILLS RANCH
			6 NORTH OF TECOPAPASS
6	7	8	7 CALVADA SPRINGS
			8 STUMP SPRING

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MOUND SPRING, NEVADA
7.5 MINUTE SERIES
SHEET NUMBER 61 OF 61